

+

**APPENDIX
Of NCRAC
Funded Research
Publications**
Updated April 2022

APPENDIX

Contents

AQUACULTURE DRUGS	5
Publications in Print.....	5
Reports	5
Manuscripts.....	6
Oral Presentations:	6
Peer-reviewed.....	7
Posters	7
Papers Presented	7
Thesis	9
BAITFISH.....	9
Publications in Print.....	9
Thesis	10
CONFERENCES/WORKSHOPS/ SYMPOSIA	10
CD-ROM.....	10
National Aquaculture Extension Workshop/Conferences.....	10
Publications in Print.....	10
North Central Regional Aquaculture Conferences.....	10
Proceedings	10
Proceedings of the North Central Regional Aquaculture Conference. 1991.....	10
First North Central Regional Aquaculture Conference, Percis III	10
Publication in Print.....	10
CRAYFISH.....	11
Publications in Print.....	11
Papers Presented	11
ECONOMICS/MARKETING	11
Publications in Print.....	11
Papers Presented	13
EXTENSION	15
NCRAC Extension Fact Sheet Series	15
NCRAC Technical Bulletin Series.....	16
NCRAC Culture Series	18
Webinars	19
Non Peer-reviewed.....	20
Oral Presentations	21

APPENDIX

Other Videos	26
CD-ROMs	26
Situation and Outlook Report.....	26
Other Publications in Print.....	26
Digital Publications.....	27
Popular Articles.....	27
Peer-reviewed.....	27
Workshops/Conferences/Symposia/Papers Presented.....	28
Proceedings	34
FEED TRAINING CARNIVOROUS FISH	35
Publication in Print.....	35
Paper Presented	35
HYBRID STRIPED BASS	35
Publications in Print.....	35
Papers Presented	37
LARGEMOUTH BASS.....	40
Publication in Print.....	40
NATIONAL COORDINATOR FOR AQUACULTURE INADs/NADAs.....	40
Publications in Print.....	40
Papers Presented	41
NUTRITION/DIETS.....	51
Publications in Print.....	51
Manuscript	52
Papers Presented	52
SALMONIDS	53
Publications in Print.....	53
Papers Presented	54
SNAIL MANAGEMENT/GRUB CONTROL	56
Publications in Print.....	56
Papers Presented	56
SUNFISH	56
Publications in Print.....	56
Manuscript	59
Non Peer-reviewed Extension Factsheets	59
Oral Presentations	59
Papers Presented	60

APPENDIX

Peer-reviewed.....	62
Posters	63
Thesis	63
TILAPIA	63
Publications in Print.....	63
Papers Presented	65
VIRAL HEMORRHAGIC SEPTICEMIA (VHS).....	65
Non-Peer-reviewed Extension Factsheets.....	65
Oral Presentations	65
Publication in Print.....	66
Papers Presented	66
WALLEYE	66
Publications in Print.....	66
Papers Presented	70
WASTES/EFFLUENTS	73
Publications in Print.....	73
Manuscripts.....	74
Papers Presented	74
WHITE PAPERS	75
Publications in Print.....	75
YELLOW PERCH.....	76
Publications in Print.....	76
Non peer-reviewed Articles	80
Non peer-reviewed Fact Sheets.....	80
Oral Presentations	80
Papers Presented	80
Posters	86
Presentations	86

APPENDIX

AQUACULTURE DRUGS

Publications in Print

Barry, T.P., A. Marwah, and P. Marwah. 2007.

Stability of 17 α -methyltestosterone in fish feed. *Aquaculture* 271:523-529.

Cupp, A. R., Hartleb, C. F., Fredricks, K. T. and Gaikowski, M. P. 2014. , Effectiveness of eugenol sedation to reduce the metabolic rates of cool and warm water fish at high loading densities. *Aquaculture Research*. Published online at doi: 10.1111/are.12485

Grayson, J.D. 2015. Improvement of Yellow Perch Larvae Culture via Live Food Enrichment with Polyunsaturated Fatty Acids. M.Sc. Dissertation. Ohio State University, Columbus, 57 pp.

Johnson, T., Phelps, N. 2017. Bacterial community profiling of wild and farmed fish from the upper Midwestern US. *PLOS One* (in preparation)

Malison, J.A., J.A. Held, L.S. Procarione, and

M.A.R. Garcia-Abiado. 1998. The production of monosex female populations of walleye from intersex broodstock. *Progressive Fish Culturist* 60(1):20-24.

Marwah, A., P. Marwah, and H. Lardy. 2005.

Development and validation of a high performance liquid chromatography assay for 17 α -methyltestosterone in fish feed. *Journal of Chromatography B*:824:107-115.

Marwah, A., X. Nianzu, P. Marwah, and T.P. Barry.

2010. Development and validation of a high performance liquid chromatography-mass spectrometry method for 17 β -methyltestosterone in aquatic water systems. *Journal of Applied and Natural Science* 2:182-189.

Meinertz, J.R., T.M. Schreier, and J.A. Bernardy. 2008. Evaluation of a method for determining concentrations of an AQUI-S™ residue, isoeugenol, in fillet tissue from cold, cool, and warm water fish species. *Journal of the Association of Official Analytical Chemists International* 91:884-891.

Reports

Green, B.W. 1996. Direct review submission to Division of Toxicology and Environmental Science, Center for Veterinary Medicine, U.S.

Food and Drug Administration in support of the Tilapia 17 α -Methyltestosterone INAD (INAD #9647 A0000, January 24, 1996).

Kohler, C.C., A.M. Kelly, M.J. DeJesus, E.M. Carnevale, S.R. Syska, and W.M. Muhlach. 1998. The safety of 17 α -Methyltestosterone for induction of sex reversal in walleye. Final Report of the Safety Study for INAD 9647 E0009 and E0011. 602 pp.

Meinertz, J.R. 2010. Feed production report for study title, "Method transfer study for the analytical method to determine 17- α methyltestosterone concentrations in fish feed." Submitted to Rangen Inc. (Buhl, Idaho). 29 pp.

Meinertz, J.R. N. Wijewickreme, and B. Coates. 2010. Method transfer study for the analytical method to determine 17 α -methyltestosterone concentrations in fish feed. Final report submitted to the FDA's Center for Veterinary Medicine, December 20, 2010. 1089 pages.

Meinertz, J.R. and T.M. Schreier. 2008. Evaluation of a proposed determinative method for determining concentrations of isoeugenol in fillet tissue from cold, cool, and warm water fish species. Submitted to the Center for Veterinary Medicine, U.S. Food and Drug Administration for INAD 11-475. 3,292 pp.

APPENDIX

Manuscripts

Barry, T.P., P. Marwah, and A. Marwah. 2011. Transformation of 17 α -methyltestosterone in aquatic-sediment systems. *Journal of Applied and Natural Science* 3(1): 1-9.

Cupp AR, Fredricks KT, Porcher SK, Smerud JR, Hartleb CF, and Gaikowski MP (2016b). Survival and behavioral responses of cool and warm water fish sedated with AQUI-S®20E (10% eugenol) at high loading densities. *Aquaculture Research*. DOI:10.1111/are.12992

Cupp AR, Hartleb CF, Fredricks KT, and Gaikowski MP (2016a). Effectiveness of eugenol sedation to reduce the metabolic rates of cool and warm water fish at high densities. *Aquaculture Research* 47:234-242. DOI: 10.1111/are.12485

Cupp, A.R., T.M. Schreier and S.M. Schleis. Live transport of yellow perch (*Perca flavescens*) and Nile tilapia (*Oreochromis niloticus*) in AQUI-S® 20E (10% eugenol) at high loading densities. In journal review.

Marwah, A., X. Nianzu, P. Marwah, , and T.P. Barry. 2010. Development and validation of a liquid chromatography-mass spectrometry method for 17 α -methyltestosterone in aquatic water systems. *Journal of Applied and Natural Science* 2(2):182-189.

Oral Presentations:

Cupp AR, Gaikowski MP, Fredricks KT, and Hartleb CF. Potential use of AQUI-S®20E light sedation for live transport. Presented at the MidContinent Warmwater Fish Culture Workshop in Council Bluffs, IA. February 2014.

Cupp AR, Gaikowski MP, Fredricks KT, and Hartleb CF. Effects of AQUI-S®20E sedation on yellow perch *Perca flavescens* and Nile tilapia *Oreochromis niloticus* during transport. Presented at the 19th Annual Drug Approval Workshop in Bozeman, MT. July 2013.

Cupp AR. Effects of AQUI-S®20E (10% eugenol) sedation on yellow perch *Perca flavescens* and Nile tilapia *Oreochromis niloticus* for transport. Thesis research presentation and defense. University of Wisconsin – Stevens Point, Stevens Point, WI. June 2013.

Cupp AR, Meinertz JR, Fredricks KT, Porcher SR, and Smerud JR. Effectiveness of AQUI-S® 20E for yellow perch *Perca flavescens* and tilapia *Oreochromis niloticus* for live transport. Presented at the 2012 Aquaculture Drug Approval Coordination Workshop. La Crosse, WI. July 2012.

Keleher W. 2021. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: The Use of Bacterins and Vaccines in Aquaculture, presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled “Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials,” Sept. 18, 2021, Black Creek, WI.

Smith M.A. and West W.M. 2021. Welcome and Housekeeping. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials. presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled “Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials,” Sept. 18, 2021, Black Creek, WI.

Smith R. 2021. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: History of the *Aeromonas salmonicida* Vaccination Project and how it Came About, presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled “Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials,” Sept. 18, 2021, Black Creek, WI.

Smith R. 2021. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Recent Data Derived from Trials Involving Vaccinated Yellow Perch, presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled “Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials,” Sept. 18, 2021, Black Creek, WI.

APPENDIX

Stiverson J. and Yu Z. 2015. Isolation and identification of probiotic bacteria from the gut of yellow perch, *Perca flavescens*, and evaluation of their probiotic potential against *Vibrio anguillarum*. Congress on Gastrointestinal Function, Chicago, April 13-15, 2015.

West W.M., Smith R, Smith M.A. 2021, Shavaliier MA, Deng D-F, Keleher W, Loch TP*. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: An Introduction to the Project & Fish Health Overview, presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled "Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials," Sept. 18, 2021, Black Creek, WI.

West W.M. 2021. Vaccinating Yellow Perch Against *Aeromonas salmonicida*: A Producers Perspective on Yellow Perch Vaccination, presented during the USDA-NIFA NCRAC funded Workshop and Farm Tour entitled "Vaccinating Yellow Perch Against *Aeromonas salmonicida*: Lab, Farm, and Field Trials," Sept. 18, 2021, Black Creek, WI

Peer-reviewed

Treanor, H.B., Ray, A.M., Amberg, J.J., Gaikowski, M.P., Ilgen, J.E., Gresswell, R.E. and Webb, M.A.H. Submitted. Assessing carbon dioxide as a tool for supplementing winter kill in natural rearing ponds. Aquaculture.

Posters

Aaron Cupp, C.F. Hartleb, K.T. Fredricks and M.P. Gaikowski, M.S. March 2013. The effects of AQUI-S 20E (10% eugenol) sedation on yellow perch, *Perca flavescens*, and tilapia, *Oreochromis niloticus*, during transport. Poster presented at the 2013 Wisconsin Aquaculture Conference in Oconomowoc, WI. March 2013

Papers Presented

Barry, T.P., A. Marwah, and P. Marwah. 2006. 17 α - methyltestosterone: product chemistry. 12th Annual Drug Approval Coordination Workshop, and National Aquaculture Drug Research Forum, La Crosse, Wisconsin, August 1-2, 2006.

Barry, T.P., A. Marwah, and P. Marwah. 2006. 17 α - methyltestosterone: environmental safety. 12th Annual Drug Approval Coordination Workshop, and National Aquaculture Drug Research Forum, La Crosse, Wisconsin, August 1-2, 2006.

Barry, T.P., A. Marwah, and P. Marwah. 2007. Measurement and stability of 17 α - methyltestosterone in fish feed. Aquaculture 2007, San Antonio, Texas, February 26-March 2, 2007.

Barry, T.P., A. Marwah, and P. Marwah. 2007. Fate of 17 α -methyltestosterone in water/sediment systems. Aquaculture 2007, San Antonio, Texas, February 26-March 2, 2007.

Barry, T.P., P. Marwah, and A. Marwah. 2007. 17 α - methyltestosterone: product chemistry. 13th Annual Drug Approval Coordination Workshop, and National Aquaculture Drug Research Forum, Bozeman, Montana, July 31-August 1, 2007.

Barry, T.P., P. Marwah, and A. Marwah. 2007. Fate of 17 α -methyltestosterone in water/sediment systems. 13th Annual Drug Approval Coordination Workshop, and National Aquaculture Drug Research Forum, Bozeman, Montana, July 31-August 1, 2007.

Cupp, A.R., M.P. Gaikowski, K.T. Fredricks and C.F. Hartleb. 2014. Potential use of AQUI-S®20E light sedation for live transport. Presented at the MidContinent Warmwater Fish Culture Workshop in Council Bluffs, IA. February 2014.

Cupp, A.R., M.P. Gaikowski, K.T. Fredricks and C.F. Hartleb. 2013. Effects of AQUI-S®20E sedation on yellow perch *Perca flavescens* and Nile tilapia

APPENDIX

-
- Oreochromis niloticus* during transport. Presented at the 19th Annual Drug Approval Coordination Workshop in Bozeman, MT. July 2013.
- Cupp, A.R., J.R. Meinertz, C.F. Hartleb, K.T. Fredricks, S.T. Porcher, and J.R. Smerud. 2012. Effectiveness of AQUI-S® 20E for yellow perch *Perca flavescens* and tilapia *Oreochromis niloticus* for live transport. Presented at the 18th Annual Aquaculture Drug Approval Coordination Workshop. July 2012. La Crosse, WI.
- Gaikowski, M.P. 2011. Status of the method transfer study for determining 17 α -methyltestosterone concentrations in fish feed. Presented at the 17th Annual Aquaculture Drug Approval Coordination Workshop, Bozeman, Montana, August 2-4, 2011.
- Gaikowski, M.P. 2011. Status of the method transfer study for determining 17 α -methyltestosterone concentration in feed. 17th Annual Drug Approval Coordination Workshop, August 2-4, 2011, Bozeman, Montana.
- Gaikowski, M.P. 2011. Status of the method transfer study for determining 17 α -methyltestosterone concentrations in fish feed. Presented at the 17th Annual Aquaculture Drug Approval Coordination Workshop, Bozeman, Montana, August 2-4, 2011.
- Grayson, J.D., K. Kwasek, M. Wojno, N. Shabana, and K. Dabrowski. 2014. Improving yellow perch larvae culture by utilizing live food enrichment with PUFA. Aquaculture America WAS, Washington. February 9012, 2014.
- Kelly, A.M. 2006. Progress on the Target Animal Safety Study for 17 α -methyltestosterone. Aquaculture America 2006, February 13-16, 2006, Las Vegas, Nevada.
- Kohler, C.C., A.M. Kelly, E.M. Carnivale, and W.L. Muhlach. 1997. Target animal safety studies for aquaculture. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Kwasek, K., M. Wojno, A. Buentello and K. Dabrowski. 2014. Can replacement of 75% fish meal protein with soybean meal support optimal growth of yellow perch? Aquaculture America WAS, Washington. February 9012, 2014.
- Malison, J.A. 1997. Reproduction and sex reversal in yellow perch and walleye. 1997 North Central Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Marwah, A., P. Marwah, and H. Lardy. 2005. Validated LC-MS methods for the quantitation of 17 α -methyltestosterone in fish feed: application of multifactorial experimental design. American Society of Mass Spectroscopy, San Antonio, Texas, June 5-9, 2005 (poster presentation).
- Meinertz, J.R. 2009. Method transfer study for 17 α - methyltestosterone in feed. Presented at the 16th Annual Aquaculture Drug Approval Coordination Workshop, Bozeman, Montana, August 3-5, 2010.
- Meinertz, J.R. 2009. 17 α -methyltestosterone feed method transfer study. Presented at the 15th Annual Aquaculture Drug Approval Coordination Workshop, Little Rock, Arkansas, June 9-11, 2009.
- Meinertz, J.R. 2009. 17 α -methyltestosterone feed method transfer study. 15th Annual Aquaculture Drug Approval Coordination Workshop, Little Rock, Arkansas, June 9-11, 2009.
- Meinertz, J.R. 2010. Method transfer study for 17 α - methyltestosterone in feed. 16th Annual Drug Approval Coordination Workshop, Bozeman, Montana, August 3-5, 2010.
- Riche, M., and D.L. Garling, Jr. 1999. Digestibility and retention of nitrogen in tilapia (*Oreochromis niloticus*) fed phytase treated soybean meal in a recirculating system. 30th Annual Meeting of the World Aquaculture Society, Sydney, Australia, April 26-May 2, 1999.

APPENDIX

Tuttle-Lau, M.T., and M.P. Gaikowski. 2009.

UMESC Efforts to Approve TM-200® for Fish or Aquaflor® to Control Motile Aeromonad Septicemia. 15th Annual Aquaculture Drug Approval Workshop, June 9-11, 2009, Little Rock, Arkansas.

Tuttle-Lau, M.T., A.R. Cupp, S.M. Schleis, and M.P. Gaikowski. 2011. Efficacy of TM-200® for Fish or Aquaflor® to Control Mortality from Motile Aeromonad Septicemia. 17th Annual Aquaculture Drug Approval Workshop, August 2-4, 2011, Bozeman, Montana.

Thesis

Aaron Cupp M.S. 2013. The effects of Aqual-S® 20E (10% eugenol) sedation on yellow perch, *Perca flavescens*, and Nile tilapia, *Oreochromis niloticus*, during transport. Master's Thesis Defense, UW-Stevens Point, Stevens Point, WI, June 27, 2013

Grayson, J., 2014. Improvement of Yellow Perch larvae culture via live food enrichment with polyunsaturated fatty acids. Master's thesis, Ohio State University, Columbus, OH: Not available (November 24, 2014).

Treanor, H.B., 2010. Investigating effects of the piscicide rotenone on amphibians in southwestern Montana through laboratory experiments and field trials. Master's Thesis. Montana State University, Bozeman, MT

BAITFISH

Publications in Print

Bozwell, J.L., R.D. Clayton, and J.E. Morris. 2009. Use of hydrogen peroxide to improve golden shiner egg hatchability. *North American Journal of Aquaculture* 71:238-241.

Meronek, T.G. 1994. Status of the bait industry in the North Central Region of the United States. Master's thesis. University of Wisconsin, Stevens Point.

Meronek, T.G., F.A. Copes, and D.W. Coble. 1995. A summary of bait regulations in the north central United States. *Fisheries* 20(11):16-23.

Papers Presented

Copes, F.A. 1993. Aquaculture shortcourse. Sponsored by University of Wisconsin-Sea Grant and Wisconsin Department of Agriculture, Greenwood, Wisconsin, March 1993.

Copes, F.A. 1995. Baitfish aquaculture. North Central Regional Aquaculture Conference/Ninth Annual Minnesota Aquaculture Conference, Minneapolis, Minnesota, February 1995.

Kent, T., J.E. Morris, and R.D. Clayton. 2009. Feeding golden shiner fry commercial diets. Washington, February 15-18, 2009.

Meronek, T.G. 1993. Survey of the bait industry in the north central United States. Annual Meeting of the Michigan Fish Farmers Association, Cadillac, Michigan, February 1993.

Meronek, T.G. 1993. Survey of the bait industry in the north central United States. Seventh Annual Minnesota Aquaculture Conference, Alexandria, Minnesota, March 1993.

Meronek, T.G. 1993. Survey of the bait industry in the north central United States. Illinois Fish Farmers Association, Pana, Illinois, March 1993.

Meronek, T.G. 1994. Status of the bait industry in the North Central Region. Annual Meeting of the Wisconsin Chapter of the American Fisheries Society, Marinette, Wisconsin, January 1994.

APPENDIX

Meronek, T.G. 1994. Baitfish aquaculture and production. Governor's Conference: Wisconsin Aquaculture >94. University of Wisconsin, Stevens Point, February 1994.

Morris, J.E. and T. Kent. 2008. New investigations into golden shiner culture. U.S. Trout Farmers/Midwest Aquaculture. Milwaukee, Wisconsin, September 18-20, 2008.

Morris, J.E. 2010. NCRAC Baitfish workshop, La Crosse, Wisconsin, September 21, 2010.

Thesis

Kent, Thomas. 2009. New investigations into golden shiner culture. Master's Thesis, Iowa State University, Ames, Iowa. Available at <http://lib.dr.iastate.edu/etd/12251/> (February 2015).

CONFERENCES/WORKSHOPS/ SYMPOSIA

Environmental Strategies for Aquaculture Symposium

CD-ROM

Kinnunen, R. 2002. Environmental Strategies for Aquaculture Symposium proceedings. NCRAC CD-ROM Series #102, NCRAC Publications Office, Iowa State University, Ames.

National Aquaculture Extension Workshop/Conferences

Publications in Print

Flimlin, G. 2011. NAEC 2011 Agenda and Abstracts. 5th National Aquaculture Extension Conference, Memphis, Tennessee, June 5-7, 2011.

National Aquaculture Extension Conference: A Program Summary of Presentations, Posters and Aquaculture Short Courses. 1997. National Extension Aquaculture Conference, Annapolis, Maryland, April 8-12, 1997. Maryland Sea Grant Extension Publication Number UM-SG-MAP- 97-01, College Park, Maryland. (Also available electronically at: <http://www.mdsg.umd.edu:80/extensionconf/su mmmary.html>).

Proceedings of the National Extension Aquaculture Workshop. 1992. National Extension Aquaculture Workshop, Ferndale, Arkansas, March 3-7, 1992.

North Central Regional Aquaculture Conferences

Proceedings

Morris, J.E., editor. 1999. Aquaculture at the crossroads: linking the past to the future. Compilation of abstracts, papers, and supporting articles for the Fourth North Central Regional Aquaculture Conference, Columbia, Missouri, February 24-26, 1999.

Proceedings of the North Central Regional Aquaculture Conference. 1991.

First North Central Regional Aquaculture Conference, Percis III

Publication in Print

Barry, T.P., and J.A. Malison, editors. 2004. Proceedings of the Percis III: The Third International Percid Fish Symposium. University of Wisconsin Sea Grant Institute, Madison.

APPENDIX

CRAYFISH

Publications in Print

- Brown, P., and J. Gunderson, editors. 1997. Culture potential of selected crayfishes in the North Central Region. NCRAC Technical Bulletin Series #112, NCRAC Publications Office, Iowa State University, Ames.
- Fetzner, J.W., Jr., R.J. Sheehan, and L.W. Seeb. 1997. Genetic implications of broodstock selection for crayfish aquaculture in the Midwestern United States. *Aquaculture* 154:39- 55.
- Gunderson, J.L. 1995. Rusty crayfish: a nasty invader, the biology, identification, and impacts of the rusty crayfish. Minnesota Sea Grant Extension Publication, University of Minnesota, Duluth.
- Richards, C., J.L. Gunderson, P. Tucker, and M. McDonald. 1995. Crayfish and baitfish culture in wild rice paddies. Technical Report No. NRRI/TR-95/39. Natural Resources Research Institute, Duluth, Minnesota.

Papers Presented

- Brown, P.B. 1994. Pond production of crayfish. Workshop on Getting Started in Commercial Aquaculture Raising Crayfish and Yellow Perch, Jasper, Indiana, October 14-15, 1994.
- Brown, P.B. 1994. Crayfish and aquatics: raising fish for profit. Indiana Horticultural Congress, Indianapolis, Indiana.
- Brown, P.B. 1995. Crayfish aquaculture in the north. Nebraska Aquaculture Conference, North Platte, Nebraska, March 25, 1995.
- Gunderson, J.L. 1994. Raising crayfish commercially. Development 94, Detroit Lakes, Minnesota, February 18, 1994.
- Gunderson, J.L. 1994. Softshell crayfish production. *Aqua >94*, 8th Annual Minnesota Aquaculture Conference, Alexandria, Minnesota, March 4, 1994.
- Gunderson, J.L. 1994. Outdoor culture systems and crayfish production. Minnesota Extension Service Aquaculture Seminar, Thief River Falls, Minnesota, April 25, 1994.
- Gunderson, J.L. 1994. Softshell crayfish production. Workshop on Getting Started in Commercial Aquaculture Raising Crayfish and Yellow Perch, Jasper, Indiana, October 14-15, 1994.
- Gunderson, J.L. 1995. Diversity in aquaculture– crawfish. Wisconsin Aquaculture >95, Stevens Point, Wisconsin, March 17, 1995.

ECONOMICS/MARKETING

Publications in Print

- Aubineau, C.M. 1996. Characterization of the supply of walleye fingerlings in the north central region of the U.S. Master's thesis. Illinois State University, Normal.
- Brown, G.J. 1994. Cost analysis of trout production in the North Central states. Master's thesis. Ohio State University, Columbus.
- Edon, A.M.T. 1994. Economic analysis of an intensive recirculating system for the production of advanced walleye fingerlings in the North Central Region. Master's thesis. Illinois State University, Normal.

APPENDIX

- Floyd, D.W., and R.M. Sullivan. 1990. Natural resources and aquaculture: the policy environment in the North Central states. Proceedings of the Third Symposium on Social Science and Resource Management, Texas A&M University, College Station, Texas.
- Floyd, D.W., R.M. Sullivan, R.L. Vertrees, and C.F. Cole. 1991. Natural resources and aquaculture: emerging policy issues in the North Central states. *Society and Natural Resources* 4:123-131.
- Gleckler, D.P. 1991. Distribution channels for wild- caught and farm-raised fish and seafood: a survey of wholesale and retail buyers in six states of the North Central Region. Master's thesis. Ohio State University, Columbus.
- Hushak, L.J. 1993. North Central Regional aquaculture industry situation and outlook report, volume 1 (revised October 1993). NCRAC Publications Office, Iowa State University, Ames.
- Hushak, L., C. Cole, and D. Gleckler. 1993. Survey of wholesale and retail buyers in the six southern states of the North Central Region. NCRAC Technical Bulletin Series #104, NCRAC Publications Office, Iowa State University, Ames.
- Hushak, L.J., D.W. Floyd, and R.L. Vertrees. 1992. Aquaculture: a competitive industry in North Central states? *Ohio's Challenge* 5:3-5.
- Knudson, W., Valle de Souza, S., Quagraine, K. K., Athnos, A., Kinnunen, R., Hitchens, P. and Etumnu, C. 2021. Reasons why seafood is not on restaurant menus. MSU Extension publication.
- Makowiecki, E.M.M. 1995. Economic analysis of an intensive recirculating system for the production of walleye from fingerling to food size. Master's thesis. Illinois State University, Normal.
- O'Rourke, P.D. 1996. Economic analysis for walleye aquaculture enterprises. Pages 135-145 *in* R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- O'Rourke, P.D. 1996. The economics of recirculating aquaculture systems. *In* Proceedings of successes and failures in commercial recirculating aquaculture, Roanoke, Virginia, July 19-21, 1996.
- Quagraine, K. K., Valle de Souza, S., Athnos, A., Etumnu, C., Knudson, W., Kinnunen, R. and Hitchens, P. 2021. Seafood survey results: Consumer purchase preferences. IL-IN Sea Grant Extension publication.
- Riepe, J.R. 1997. Costs for pond production of yellow perch in the North Central Region, 1994-95. NCRAC Fact Sheet Series #111, NCRAC Publications Office, Iowa State University, Ames.
- Riepe, J.R. 1997. Enterprise budgets for yellow perch production in cages and ponds in the North Central Region, 1994/95. NCRAC Technical Bulletin Series #111, NCRAC Publications Office, Iowa State University, Ames.
- Riepe, J.R. 1997. Yellow perch markets in the North Central Region: results of a 1996/97 survey. Office of Agricultural Research Programs, Department of Agricultural Economics, Purdue University, West Lafayette, Indiana.
- Thomas, S.K. 1991. Industry association influence upon state aquaculture policy: a comparative analysis in the North Central Region. Master's thesis. Ohio State University, Columbus.
- Thomas, S.K., D.W. Floyd, and R.L. Vertrees. 1993. Industry association influence upon state aquaculture policy in the North Central Region. *The Ohio Journal of Science* 93(1):19-26.

APPENDIX

-
- Thomas, S.K., R.L. Vertrees, and D.W. Floyd. 1991. Association influence upon state aquaculture policy : comparative analysis in the North Central Region. *The Ohio Journal of Science* 91(2):54.
- Thomas, S.K., R.L. Vertrees, and D.W. Floyd. 1993. Aquacultural marketing law: assessing state- level regulatory approaches in the North Central Region. *Journal of Applied Aquaculture* 2(1):65- 84.
- Thomas, S.K., R.M. Sullivan, R.L. Vertrees, and D.W. Floyd. 1992. Aquaculture law in the North Central states: a digest of state statutes pertaining to the production and marketing of aquacultural products. NCRAC Technical Bulletin Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Tudor, K., and P.D. O'Rourke. 2002. Potential wholesale demand for farm-raised sunfish and walleye hybrids in Illinois. Pages 228-232 *in* Proceedings of the Fourth International Conference on Recirculating Aquaculture, Roanoke, Virginia, July 18-21, 2002.
- Tudor, K.W., R.R. Rosati, P.D. O'Rourke, Y.V. Wu, D. Sessa, and P. Brown. 1996. Technical and economical feasibility of on-farm fish feed production using fishmeal analogs. *Aquacultural Engineering* 15(1):53-65.
- Papers Presented***
- Athnos, A. 2021. Identifying consumer seafood preferences: Opportunities for U.S. producers to serve domestic demand and replace imports. 2021 AAEA & WAEA Joint Annual Meetings, Austin, TX, Aug. 1-3, 2021.
- Brown, G.J., and L.J. Hushak. 1991. The NCRAC producers survey and what we have learned: an interim report. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Foley, P., R. Rosati, P.D. O'Rourke, and K. Tudor. 1994. Combining equipment components into an efficient, reliable, and economical commercial recirculating aquaculture system. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Gleckler, D.P., L.J. Hushak, and M.E. Gerlow. 1991. Distribution channels for wild-caught and farm- raised fish and seafood. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Kinnunen, R. and R. Palmer. 2003. Marketability of hybrid walleye: preliminary results of industry and consumer surveys. NCRAC Hybrid Walleye Workshop, Cape Girardeau, Missouri, March 5, 2003.
- Kohler, S.T. 1995. Hybrid striped bass cost of production. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- O'Rourke, P.D. 1995. Profitability and volume-cost business analysis tools for the aquaculture enterprise. Presented at Illinois-Indiana Aquaculture Conference and North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- O'Rourke, P.D. 1996. The economics of recirculating aquaculture systems. Conference on Successes and Failures in Commercial Recirculating Aquaculture, Roanoke, Virginia, July 19-21, 1996.
- O'Rourke, P.D., and A.M.T. Edon. 1995. Economic analysis of advanced walleye fingerling production in an intensive recirculating system. Combined North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow (Second North Central Regional Aquaculture Conference), Minneapolis, Minnesota, February 17-18, 1995.

APPENDIX

- O'Rourke, P.D., K. Tudor, and R. Rosati. 1994. The selection and use of economic tools in the aquacultural engineering decision making process to determine the comparative costs of alternate technical solutions. 25th Annual Meeting of the World Aquaculture, New Orleans, Louisiana, January 12-18, 1994.
- O'Rourke, P.D., K. Tudor, and R. Rosati. 1994. Economic risk analysis of production of tilapia (*Oreochromis niloticus*) in a modified Red Ewald-style recirculating system operated under commercial conditions. 25th Annual Meeting of the World Aquaculture Society Silver Anniversary Meeting, New Orleans, Louisiana, January 12-18, 1994.
- Palmer, R. 2002. Marketability of hybrid walleye: preliminary results of industry and consumer surveys. NCRAC Hybrid Walleye Workshop, Cadillac, Michigan, February 7, 2002.
- Quagraine, K.K., C. Etumnu, A. Athnos, S. Valle de Souza, W. Knudson, R. Kinnunen, and P. Hitchens. 2021. Measuring consumer willingness to pay for live seafood. 2021 AAEE & WAEA Joint Annual Meetings, Austin, TX, Aug. 1-3, 2021.
- Quagraine, K.K. 2021. The seafood basket: Application of zero-inflated and poisson hurdle models for fish count purchase. 2021 AAEE & WAEA Joint Annual Meetings, Austin, TX, Aug. 1-3, 2021.
- Riepe, J.R. 1994. Production economics of species cultured in the North Central Region. Animal Science, AS-495, one-week summer course Aquaculture in the Midwest, Purdue University, West Lafayette, Indiana, June 13-17, 1994.
- Riepe, J.R. 1994. Getting started in commercial aquaculture: economics. Workshop on Getting Started in Commercial Aquaculture Raising Crayfish and Yellow Perch, Jasper, Indiana, October 14-15, 1994.
- Riepe, J.R. 1997. Revisiting retail and wholesale markets (walleye and yellow perch). Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Riepe, J.R., J. Ferris, and D. Garling. 1995. Economic considerations in yellow perch aquaculture. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Robinson, M., D. Zepponi, and B.J. Sherrick. 1991. Assessing market potential for new and existing species in the North Central Region. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Rosati, R., P.D. O'Rourke, K. Tudor, and P. Foley. 1994. Production of tilapia (*Oreochromis niloticus*) in a modified Red Ewald-style recirculating system when operated under commercial conditions. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Rosati, R., P.D. O'Rourke, K. Tudor, and P. Foley. 1994. Technical and economical considerations for the selection of oxygen incorporation devices in a recirculating aquaculture system. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Tudor, K., R. Rosati, P.D. O'Rourke, Y.V. Wu, D. Sessa, and P. Brown. 1994. Technical and economical feasibility of on-farm fish feed production using fishmeal analogs. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Valle de Sousa, S. 2020. NCR seafood and market trends. NCRAC Annual Program Planning Meeting & Ohio Aquaculture Association Annual Conference, Columbus, OH, Feb. 1-2, 2020

APPENDIX

Valle de Sousa, S. 2021. Changes in seafood: Emerging opportunities. Illinois-Indiana Sea Grant Aquaculture Marketing Webinar Series, online, Feb. 22, 2021.

EXTENSION

NCRAC Extension Fact Sheet Series

Cain, K., and D. Garling. 1993. Trout culture in the North Central Region. NCRAC Fact Sheet Series #108, NCRAC Publications Office, Iowa State University, Ames.

Dvorak, G. 2009. Biosecurity for aquaculture facilities in the North Central Region. NCRAC Fact Sheet Series #115, NCRAC Publications Office, Iowa State University, Ames.

Engle, C., K. Quagraniem M. Smith, C. Weeks, and P. Zajiicek. 2019. Leadership development training for aquaculture producers. NCRAC Fact Sheet Series #112, NCRAC Publications Office, Iowa State University, Ames

Faisal, M., and D. Garling. 2004. What is whirling disease? NCRAC Fact Sheet Series #113, NCRAC Publications Office, Iowa State University, Ames.

Garcia, A. 2020. Installing a culture of safety in aquaculture. NCRAC Fact Sheet Series #123, NCRAC Publications Office, Iowa State University, Ames

Garcia, A. 2020. Understanding fish feed labels. NCRAC Fact Sheet Series #126, NCRAC Publications Office, Iowa State University, Ames

Garling, D.L. 1992. Making plans for commercial aquaculture in the North Central Region. NCRAC Fact Sheet Series #101, NCRAC Publications Office, Iowa State University, Ames.

Gaunt, P. 2020. Understanding the veterinary feed directive order in aquaculture. NCRAC Fact Sheet Series #127, NCRAC Publications Office, Iowa State University, Ames

Harding, L.M., C.P. Clouse, R.C. Summerfelt, and J.E. Morris. 1992. Pond culture of walleye fingerlings. NCRAC Fact Sheet Series #102, NCRAC Publications Office, Iowa State University, Ames.

Hicks, C., R. Pierce, and D. Brune. 2022. Conversion of confined animal production facilities and other unused agriculture buildings for fish culture. NCRAC Fact Sheet Series #125, NCRAC Publications Office, Iowa State University, Ames

Kinunen, R. E. 2019. The seafood HACCP regulation and its effects on aquaculture. NCRAC Fact Sheet Series #120, NCRAC Publications Office, Iowa State University, Ames.

Kinunen, R. E. 2019. Aquatic invasive species HACCP in baitfish and aquaculture operations. NCRAC Fact Sheet Series #121, NCRAC Publications Office, Iowa State University, Ames.

Kohler, S.T., and D.A. Selock. 1992. Choosing an organizational structure for your aquaculture business. NCRAC Fact Sheet Series #103, NCRAC Publications Office, Iowa State University, Ames.

Morris, J.E. 1993. Pond culture of channel catfish in the North Central Region. NCRAC Fact Sheet Series #106, NCRAC Publications Office, Iowa State University, Ames.

Morris, J.E., C.C. Kohler, and C.C. Mischke. 1999. Pond culture of hybrid striped bass in the North Central Region. NCRAC Fact Sheet Series #107, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

Ray, A. and R. Rode. 2021. Small scale, year-round shrimp farming in temperate climate. NCRAC Fact Sheet Series #124, NCRAC Publications Office, Iowa State University, Ames

Riche, M., and D. Garling. 2003. Feeding tilapia in intensive recirculating systems. NCRAC Fact Sheet Series # 114, NCRAC Publications Office, Iowa State University, Ames.

Riepe, J.R. 1999. Marketing seafood to restaurants in the North Central Region. NCRAC Fact Sheet Series #110, NCRAC Publications Office, Iowa State University, Ames.

Riepe, J.R. 1997. Costs for pond production of yellow perch in the North Central Region, 1994-95. NCRAC Fact Sheet Series #111, NCRAC Publications Office, Iowa State University, Ames.

Riepe, J.R. 1999. Supermarkets and seafood in the North Central Region. NCRAC Fact Sheet Series #112, NCRAC Publications Office, Iowa State University, Ames.

Rode, R. and A. Heber. 2020. Buildings for aquaculture operations. NCRAC Fact Sheet Series #128, NCRAC Publications Office, Iowa State University, Ames

Smith, M.A. and C. G. Lutz. 2022. Introduction to aquaculture in the North Central Region. NCRAC Fact Sheet Series #129, NCRAC Publications Office, Iowa State University, Ames

Swann, L. 1993. Transportation of fish in bags. NCRAC Fact Sheet Series #104, NCRAC Publications Office, Iowa State University, Ames.

Swann, L., and F. Fitzgerald 1992. Use and application of salt in aquaculture. NCRAC Fact Sheet Series #105, NCRAC Publications Office, Iowa State University, Ames.

Summerfelt, R.C., R.D. Clyton, J.A. Johnson, and R.E. Kinnunen. 2010. Production of walleye as potential food fish. NCRAC Fact Sheet Series #116. NCRAC Publications Office, Iowa State University, Ames.

NCRAC Technical Bulletin Series

Brown, P., and J. Gunderson, editors. 1997. Culture potential of selected crayfishes in the North Central Region. NCRAC Technical Bulletin Series #112, NCRAC Publications Office, Iowa State University, Ames.

Daily, S., D. Selock, S. and Kohler. 2002. Fish-farm business plan workbook. NCRAC Technical Bulletin Series #117, NCRAC Publications Office, Iowa State University, Ames.

Gaylord, T.G., and J.E. Morris. In press. Hybrid striped bass culture: current knowledge in industry with emphasis on nutrition. NCRAC Technical Bulletin Series #118, NCRAC Publications Office, Iowa State University, Ames.

Gunderson, J., P. Tucker, and C. Richards. 2010. Aquaculture potential for hornyhead chubs, 2009. NCRAC Technical Bulletin Series #116, NCRAC Publications Office, Iowa State University, Ames.

Hushak, L.J., C.F. Cole, and D.P. Gleckler. 1993. Survey of wholesale and retail buyers in the six southern states of the North Central Region. NCRAC Technical Bulletin Series #104, NCRAC Publications Office, Iowa State University, Ames.

Kinnunen, R.E. 1992. North Central Region 1990 salmonid egg and fingerling purchases, production, and sales. NCRAC Technical Bulletin Series #103, NCRAC Publications Office, Iowa State University, Ames.

Lane, R.L., and J.E. Morris. 2000. Biology, prevention, and effects of common grubs (Digenetic trematodes) in freshwater fish. NCRAC Technical Bulletin Series #115, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

- Lichtkoppler, F.P. 1993. Factors to consider in establishing a successful aquaculture business in the North Central Region. NCRAC Technical Bulletin Series #106, NCRAC Publications Office, Iowa State University, Ames.
- Malison, J.A., and J.A. Held. 2008. Farm-based production parameters and breakeven costs for yellow perch grow-out in ponds in southern Wisconsin. NCRAC Technical Bulletin Series #121, NCRAC Publications Office, Iowa State University, Ames.
- Meronek, T., F. Copes, and D. Coble. 1997. The bait industry in Illinois, Michigan, Minnesota, Ohio, South Dakota, and Wisconsin. NCRAC Technical Bulletin Series #105, NCRAC Publications Office, Iowa State University, Ames.
- Morris, J.E., and C.C. Mischke. 1999. Plankton management for fish culture ponds. NCRAC Technical Bulletin Series #114 NCRAC Publications Office, Iowa State University, Ames.
- Pattillo, D. A. 2017. An overview of aquaponic systems: Hydroponic components. NCRAC Technical Bulletin Series #123, NCRAC Publications Office, Iowa State University, Ames.
- Pattillo, D. A. 2017. An overview of aquaponics\ systems: Aquaponic components. NCRAC Technical Bulletin Series #124, NCRAC Publications Office, Iowa State University, Ames.
- Ramseyer, L.J., and D. Garling. In review. Fish nutrition and aquaculture waste management. NCRAC Technical Bulletin Series #116, NCRAC Publications Office, Iowa State University, Ames.
- Riepe, J.R. 1997. Enterprise budgets for yellow perch production in cages and ponds in the North Central Region, 1994/95. NCRAC Technical Bulletin Series #111, NCRAC Publications Office, Iowa State University, Ames.
- Riepe, J.R. 1998. Walleye markets in the North Central Region: results of a 1996/97 survey. NCRAC Technical Bulletin Series #113, NCRAC Publications Office, Iowa State University, Ames.
- Summerfelt, R. C., R. E. Kinnunen, and J. A. Johnson. 2018. Production of Walleye as potential food fish. . NCRAC Technical Bulletin Series #125, NCRAC Publications Office, Iowa State University, Ames.
- Swann, L. 1992. A basic overview of aquaculture: history, water quality, types of aquaculture, production methods. NCRAC Technical Bulletin Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Swann, L., and J.R. Riepe. 1994. Niche marketing your aquaculture products. NCRAC Technical Bulletin Series #107, NCRAC Publications Office, Iowa State University, Ames.
- Swann, L., J. Morris, D. Selock, and J. Riepe. 1994. Cage culture of fish in the North Central Region. NCRAC Technical Bulletin Series #110, NCRAC Publications Office, Iowa State University, Ames.
- Thomas, S.K., R.M. Sullivan, R.L. Vertrees, and D.W. Floyd. 1992. Aquaculture law in the north central states: a digest of state statutes pertaining to the production and marketing of aquacultural products. NCRAC Technical Bulletin Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Yeo, S.E., F.P. Binkowski, and J.E. Morris. 2004. Aquaculture effluents and waste by products: characteristics, potential recovery and beneficial reuse. NCRAC Technical Bulletin Series #119, NCRAC Publications Office, Iowa State University, Ames.
- Yeo, S. In review. Vermicomposting for processing aquaculture system sludge. NCRAC Technical Bulletin Series #120, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

NCRAC Video Series

- Held, J.A., 2014. Aquaculture biosecurity. Video developed in partnership with University of Wisconsin Extension. 30.42 minutes. Available: <http://www.ncrac.org/ncrac-video> (February 17, 2015).
- Ingham, S. 1999. A guide to making safe smoked fish. NCRAC Video Series #105, NCRAC Publications Office, Iowa State University, Ames.
- Ingham, S. 2000. Fish processing plant sanitation. NCRAC Video Series #107, NCRAC Publications Office, Iowa State University, Ames.
- Morris, J.E., 2012. Aquatic vegetation management- ponds. Iowa State University, 3.15 minutes. Available: <http://www.ncrac.org/ncrac-video>. (February 17, 2015).
- Morris, J.E., and C.C. Mischke. 1998. Sunfish (*Lepomis* spp.) culture. NCRAC Video Series #104, NCRAC Publications Office, Iowa State University, Ames.
- Pattillo, D. A. 2015. Feeding Yellow Perch Fry. 2015. Iowa State University. <https://vimeo.com/127717048>
- Pattillo, D. A. 2015. Growing & Maintaining Natural Feeds for Larval Fish. Iowa State University. <https://vimeo.com/127639646>
- Pierce, R., R. Henderson, and K. Neils. 1995. Aquacultural marketing: a practical guide for fish producers. VHS format, 19 min. NCRAC Video Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Swann, L., editor. 1993. Investing in freshwater aquaculture. VHS format, 120 min. NCRAC Video Series #103, NCRAC Publications Office, Iowa State University, Ames
- Swann, L., 1992. Something fishy: hybrid striped bass in cages. VHS format, 12 min. NCRAC Video Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Swenson, W., 2000. Fish farming: some industry perspectives. NCRAC Video Series #106, NCRAC Publications Office, Iowa State University, Ames.
- Tiu, L., 2014. Water quality. Video developed in partnership with The Ohio State University. 3.01 minutes. Available: <http://www.ncrac.org/ncrac-video> (February 17, 2015).
- Tiu, L. 2014. Yellow perch harvest. Video developed in partnership with The Ohio State University. 3.59 minutes. Available: <http://www.ncrac.org/ncrac-video> (February 17, 2015).
- Tiu, L. 2014. Video developed in partnership with The Ohio State University. 4.54 minutes. Available: <http://www.ncrac.org/ncrac-video> (February 17, 2015).
- Tiu, L. 2014. Spawning yellow perch. Video developed in partnership with The Ohio State University. 3.29 minutes. Available: <http://www.ncrac.org/ncrac-video> (February 17, 2015).

NCRAC Culture Series

- Hart, S.D., D.L. Garling, and J.A. Malison, editors. 2006 Yellow perch (*Perca flavescens*) culture guide. NCRAC Culture Series #103, NCRAC Publications Office, Iowa State University, Ames.
- Lane, R., and C. Kohler. 2006. Hybrid striped bass culture guide. NCRAC Culture Series #104, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

Morris, J.E., C.C. Mischke, and D.L. Garling, editors. 2003. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.

Summerfelt, R., editor. 1996. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.

Webinars

Patillo, D. A. Aquaponics: How to Do It Yourself.

May 18, 2016. Available: <http://www.ncrac.org/video/aquaponics-how-do-it-yourself>. Accessed 11/4/2016.

Eilers, C. Final Rule: Mandatory Inspection of Fish of the order Siluriformes and Products Derived from Such Fish.

June 1, 2016. Available: <http://www.ncrac.org/video/fsis-part-i-final-rule>. Accessed 11/4/2016.

McKew, B. A. Labeling Requirements for Siluriformes Fish USDA, Agricultural Marketing Service's Voluntary Catfish Grading Program and Standards. June 8, 2016. Available: <http://www.ncrac.org/video/fsis-part-ii-labeling-requirements>. Accessed 11/4/2016.

Gwartney, B. USDA, Agricultural Marketing Service's Voluntary Catfish Grading Program and Standards. June 8, 2016. Available: <http://www.ncrac.org/video/fsis-part-ii-labeling-requirements>. Accessed 11/4/2016.

Roy Yanong. What You Need to Know About Biosecurity. July 20, 2016. Available:

<http://www.ncrac.org/video/what-you-need-know-about-biosecurity>. Accessed 11/4/2016.

Roy Yanong. How to Design Your Health & Biosecurity Plan. July 27, 2016. Available:

<http://www.ncrac.org/video/what-you-need-know-about-biosecurity-part-ii>. Accessed 11/4/2016.

Shelton, J. Recreational Fish Pond Management.

August 3, 2016. Available: <http://www.ncrac.org/video/recreational-fish-pond-management>. Accessed 11/4/2016.

Kinnunen, R. E. The HACCP Approach to Prevent the Spread of Aquatic Invasive Species by Aquaculture and Baitfish Operations. August 17, 2016. Available: <http://www.ncrac.org/video/ais-haccp-aquaculture-and-baitfish-operations>. Accessed 11/4/2016.

O'Dierno, L. U.S. Farm-Raised Finfish and Shellfish

101. September 21, 2016. Available: <http://www.ncrac.org/video/us-farm-raised-finfish-and-shellfish-101>. Accessed 11/4/2016.

Engle, C. R. Economic Impact of Regulations.

September 27, 2016. Available: <http://www.ncrac.org/video/regulatory-costs-us-aquaculture-business>. Accessed 11/4/2016.

Walton, W. C. Branding Opportunities for Oyster Farmers. October 12, 2016. Available:

<http://www.ncrac.org/video/branding-opportunities-oyster-farmers>. Accessed 11/4/2016.

Hicks, D. T. Seafood in the Diet: Benefits and Risks for Farm-Raised and Wild Finfish and Shellfish. October 22, 2016. Available: <http://www.ncrac.org/video/seafood-diet>.

Accessed 11/4/2016.

Gaunt, P. S. *Use of Veterinary Feed Directive Drugs in Aquaculture*. November 1, 2016.

Cornelisse, S. *Social Media Marketing*. November 15, 2016.

APPENDIX

Phelps, N. Fish Health: What you need to know. December 1, 2016.

Ray, A. J. *Indoor Shrimp farming*. January 18, 2017.

Non Peer-reviewed

Hicks, C. and B. Pierce. 2014. Pond Construction and Management Considerations, Link;
(http://www.lincolnu.edu/c/document_library/get_file?uuid=27d430db-9f42-44c6-97ba-3d80b0d43694&groupId=13583)

Hicks, C. and B. Pierce. 2014. Stocking for Sport Fishing; (http://www.lincolnu.edu/c/document_library/get_file?uuid=bdc8b80d-955f-4be8-811c-39ebd6aacc97&groupId=13583)

Hicks, C. and B. Pierce. 2014. Establishing Hybrid Sunfish in Ponds for Recreation;
(http://www.lincolnu.edu/c/document_library/get_file?uuid=ac9fc82b-419e-47f9-af8e-8b92026ffd61&groupId=13583)

Hicks, C. and B. Pierce. 2014. Managing Ponds and Lakes for Aquaculture and Fisheries in Missouri: Controlling Nuisance Aquatic Vegetation; (<http://extension.missouri.edu/p/G9478>)

Pattillo, D. A. Fish Health Considerations for Recirculation Aquaculture. December, 2014.
(<https://store.extension.iastate.edu/Product/Fish-Health-Considerations-for-Recirculating-Aquaculture>. October 27, 2015)

Pattillo, D. A. Standard Operating Procedures - Fish Health Management for Recirculating Aquaculture. December, 2014. (<https://store.extension.iastate.edu/Product/Standard-Operating-Procedures-Fish-Health-Management-for-Recirculating-Aquaculture> October 27, 2015)

Pattillo, D. A. Fish Monitoring Sheet (Sample).
December, 2014. (<https://store.extension.iastate.edu/Product/Fish-Monitoring-Sheet-Sample>. October 27, 2015)

Pattillo, D. A. Fish Monitoring Sheet (Excel).
December, 2014. (<https://store.extension.iastate.edu/Product/Fish-Monitoring-Excel-Sheet>. October 27, 2015)

Pattillo, D. A. Feeding Practices for Recirculating Aquaculture. December, 2014.
(<https://store.extension.iastate.edu/Product/Feeding-Practices-for-Recirculating-Aquaculture>. October 27, 2015)

Pattillo, D. A. Standard Operating Procedures – Feeding Practices and Feed Management. December, 2014.
(<https://store.extension.iastate.edu/Product/Standard-Operating-Procedures-Feeding-Practices-for-Recirculating-Aquaculture>. October 27, 2015)

Pattillo, D. A. Feeding Practices Monitoring Sheet (Sample). December, 2014.
(<https://store.extension.iastate.edu/Product/Feeding-Practices-Monitoring-Sheet-Sample>. October 27, 2015)

APPENDIX

- Pattillo, D. A. Feeding Practices Monitoring Sheet (Excel). December, 2014.
(<https://store.extension.iastate.edu/Product/Feeding-Practices-Monitoring-Excel-Sheet>. October 27, 2015)
- Pattillo, D. A. Water Quality Management for Recirculating Aquaculture December, 2014.
(<https://store.extension.iastate.edu/Product/Water-Quality-Management-for-Recirculating-Aquaculture>. October 27, 2015)
- Pattillo, D. A. Standard Operating Procedures - Water Quality Management for Recirculating Aquaculture. December, 2014. (<https://store.extension.iastate.edu/Product/Standard-Operating-Procedures-Water-Quality-Management-for-Recirculating-Aquaculture>. October 27, 2015)
- Pattillo, D. A. Water Quality Management Monitoring Sheet (Sample). December, 2014.
(<https://store.extension.iastate.edu/Product/Water-Quality-Management-Monitoring-Sheet-Sample>)
- Pattillo, D. A. Water Quality Management Monitoring Sheet (Excel). December, 2014.
(<https://store.extension.iastate.edu/Product/Water-Quality-Management-Monitoring-Excel-Sheet>. October 27, 2015)
- Pattillo, D. A. Aquaculture Water Treatment Calculations. December, 2014.
(<https://store.extension.iastate.edu/Product/Aquaculture-Water-Treatment-Calculations>. October 27, 2015)
- Oral Presentations**
- Abbey, M. 2018. Aquaponic productivity in Minnesota. Minnesota Aquaponics Symposium. St. Paul Minnesota. April 24.
- Brown, P. 2019. Eating right: why nutrition matters for fish health. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Brune, D. 2018. Zero-discharge biofloc marine shrimp production. North Central Aquaculture Conference. Kansas City, Missouri. February 9-10.
- Engle, C.R. 2019. The business of aquaculture. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Engle, C.R. 2019. Risks and how to manage them. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Engle, C.R. 2019. Successful aquaculture & aquaponics business. Iowa Aquaculture Conference. Ames, Iowa. March 23.
- Engle, C.R. 2019. Will it be profitable? Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Engle, C.R. 2019. How to survive the startup years. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Engle, C.R. 2019. Strategic marketing. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Evans, B. 2018. North Central Regional Aquaculture Center: Youth Education in Aquaculture. Available at www.ncracyea.org.
- Fischer, G. 2018. Hatchery design 101. North Central Aquaculture Conference. Kansas City, Missouri. February 9-10.
- Gascho, D. 2019. Biosecurity in aquaculture. Indiana Aquaculture Association. Russiaville, Indiana. March 15.

APPENDIX

-
- Hartleb, G. 2018. Trends in aquaponics. North Central Aquaculture Conference. Kansas City, Missouri. February 9-10.
- Hartman, K. 2018. Farm biosecurity: know your risks. Ohio Aquaculture Association, Ohio State University Aquaculture Boot Camp, North Central Regional Aquaculture Center. Making Fish Health a Priority. Reynoldsburg, Ohio. November 11.
- Hartman, K. 2018. Commercial aquaculture health program standards (CAHPS) and how your farm could be impacted. Ohio Aquaculture Association, Ohio State University Aquaculture Boot Camp, North Central Regional Aquaculture Center. Making Fish Health a Priority. Reynoldsburg, Ohio. November 11.
- Kebus, M. 2019. Fish health case studies: lessons learned from a fish veterinarian. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.
- Kinnunen, R. and C.T. Weeks AIS HAACP Verification & Certification. North Central Aquaculture Conference. Toledo, Ohio. February 22-23, 2014.
- Kinnunen, R. and C.T. Weeks AIS HAACP Verification & Certification. North Central Aquaculture Conference. Toledo, Ohio. February 22-23, 2014.
- Marquenski, S. 2019. Aquaponics case studies: management hints from the real world. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.
- Morris, J. 2019. 30 years of observing Iowa's aquaculture. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Morris, J. 2019. Best management practices for aquaculture. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Morris, J., D. Pattillo and C. Weeks. The Role of the North Central Regional Aquaculture Center in addressing challenges facing regional aquaculture development using extension and research partnerships. Aquaculture 2013. Nashville, Tennessee. February 22-25, 2013.
- Pattillo, D.A. Aquaponic System Design and Management. FarmTek's Spring 2014 Controlled Environment Agriculture School. Brown-bag lunch seminar. May 22, 2014.
- Pattillo, D.A. Aquaponic System Design and Management. James Anglers Meeting. May 22, 2014.
- Pattillo, D.A. Aquaponic System Design and Management. Reiman Gardens. Brown-bag lunch seminar. May 29, 2014.
- Pattillo, D.A. and K.A. Rosentrater. Comparison of Light Sources in Aquaponics Systems on Production Efficiencies and Resulting Economics. Aquaculture America 2014, Seattle, Washington. February 9, 2014. (<https://www.was.org/meetings/ShowAbstract.aspx?Id=31573>)
- Pattillo, D.A. Pond Management for Golf Courses. ISU Horticulture Department Seminar. April 24, 2014.
- Phelps, N.B.D. 2019. Fish get sick too: what to look for on your farm. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.
- Platt, S. 2019. Regulations for the food fish market. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Primus, A. 2019. Fish get sick too: identification and treatment of disease. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Primus, A. 2019. Treating your sick fish. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.

APPENDIX

- Primus, A. 2018. Fish health in aquaponics. Minnesota Aquaponics Symposium. St. Paul Minnesota. April 24.
- Reichley, S. 2018. Veterinary feed directive (VFD) and how the new ruling affects your farm. Ohio Aquaculture Association, Ohio State University Aquaculture Boot Camp, North Central Regional Aquaculture Center. Making Fish Health a Priority. Reynoldsburg, Ohio. November 11.
- Reichley, S. 2018. Biosecurity best management practices (BMPs). Ohio Aquaculture Association, Ohio State University Aquaculture Boot Camp, North Central Regional Aquaculture Center. Making Fish Health a Priority. Reynoldsburg, Ohio. November 11.
- Rode, B. 2019. Purdue and NCRAC updates. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Rogge, M. 2019. Microbes in aquaponics. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.
- Rogge, M. 2018. Microbes in aquaponics. North Central Aquaculture Conference. Kansas City, Missouri. February 9-10.
- Scoggin, L. 2018. Urban Organics: bringing local fish and produce to restaurants, one brewery at a time. Minnesota Aquaponics Symposium. St. Paul Minnesota. April 24.
- Smith, MA. 2019. How much feed can a central Ohio pond assimilate before fish growth is negatively impacted? Ohio Aquaculture Association Summer Newsletter.
- Smith, MA. 2019. Water quality. Fish Farmers of Ohio meeting. Wooster, Ohio. April 13.
- Smith, M.A. 2019. Stress management at every stop. Wisconsin Fish Health Workshop. Eau Claire, Wisconsin. February 16.
- Smith, M.A. 2019. Intensifying pond production systems in the Midwest. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Smith, M.A. 2019. Stress management at every stop. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Smith, MA, Lynch WE Jr., and Brehm M. 2019. Intensification of ponds in the Midwest. Iowa aquaculture annual conference. Ames, Iowa. March 22. <https://www.supportfarmers.com/iowa-aquaculture-conference/>
- Smith, MA, Lynch WE Jr., and Brehm M. 2019. Intensification of ponds in the Midwest project. Grant-funded Project Update. North Central Regional Aquaculture Center. West Des Moines, Iowa. February 23.
- Smith, MA, Lynch WE Jr., and Brehm M. 2019. Intensification of ponds in Ohio. Ohio Aquaculture Association Annual Conference. Columbus, Ohio. January 26. <https://static1.squarespace.com/static/596ee1d2197aeab55f125070/t/5c62153ea4222f2daea6c40d/1549931855326/Intensive+Pond+Study.pdf>
- Smith, M. A. 2018. Ohio Aquaculture Association summer workshop and Aquaculture Boot Camp. Marysville, Ohio. July 14. https://southcenters.osu.edu/sites/southc/files/siteibrary/sitedocuments/abc2/2018_abc2/july2018/NCRAC%20project.pdf
- Smith, M.A. 2018. Water Quality in aquaponics. Minnesota Aquaponics Symposium. St. Paul Minnesota. April 24.
- Smith, MA. 2018. NCRAC intensification project. Ohio Aquaculture Association summer workshop and

APPENDIX

Aquaculture Boot Camp. Marysville, Ohio. July 14.
https://southcenters.osu.edu/sites/southc/files/site-library/site-documents/abc2/2018_abc2/july2018/NCRAC%20project.pdf

- Smith, M.A. 2018. Stress management at every stop. Ohio Aquaculture Association, Ohio State University Aquaculture Boot Camp, North Central Regional Aquaculture Center. Making Fish Health a Priority. Reynoldsburg, Ohio. November 11.
- Smith, MA. 2019. Water quality. Fish Farmers of Ohio meeting. Wooster, Ohio. April 13.
- Stone, A. 2019. Aquatic equipment and design. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Stone, A. 2019. Chlorine dioxide, the new, old disinfectant. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Strasser, J. 2019. Fish health regulations: why we need them. Indiana Aquaculture Association. Russiaville, Indiana. March 15.
- Tapp, B. 2019. Role of markets. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Trusso, G. 2018. Commercial recirculation aquaculture: system designs and economics. North Central Aquaculture Conference. Kansas City, Missouri. February 9-10.
- Waddingham, B. 2019. Rule and regulations update. Iowa Aquaculture Conference. Ames, Iowa. March 22.
- Weeks, C.T. AC – Keeping Cool in the US? Indian Aquaculture Association Meeting. Redkey, IN. September 19, 2015.
- Weeks, C. AIS impacts on regional aquaculture – the need for effective but fair regulations and a proactive industry. Upper Midwest Invasive Species Conference, La Crosse, Wisconsin. October 29 – 31, 2012.
- Weeks C.T. Aquaculture: a global, domestic and regional perspective. Key-note presentation for Iowa Aquaculture Conference. Ames, Iowa. November 13, 2014.
- Weeks, C. 2016. MI Aquaculture - Sustainable or fodder. Michigan Environmental Health Association Annual Education Conference. March 2016.
- Weeks, C.T. Aquaculture and the Future. Michigan Seafood Summit. East Lansing, Michigan. March 12, 2015.
- Weeks, C.T. Aquaculture North Central Region US. Cooperative Opportunities in Ohio Fish Farming Industry Meeting, Wooster, Ohio. June 13, 2015.
- Weeks, C. Aquaculture trends from around the world to my back yard. Ohio Aquaculture Association, Wooster, Ohio. February 8-9, 2013.
- Weeks, C.T. Building Michigan aquaculture strong. 2014 Michigan Aquaculture Association annual meeting. Tustin, Michigan January 23, 2014.
- Weeks C.T. Commercial aquaculture in Michigan - status report for Michigan Farm Bureau Subcommittee on Policy Development. Lansing, Michigan. October 7, 2014.

APPENDIX

- Weeks, C.T. Designing a flow through raceway system for salmonids - Westers' Design. North Central Aquaculture Conference. Toledo, Ohio February 22-23, 2014.
- Weeks, C.T. Federal regulations you need to know. Ohio Aquaculture Conference. Columbus, Ohio. January 31, 2015.
- Weeks, C., Global aquaculture, where is it going and why – should I really be buying more seafood? Purdue Veterinary Medicine Conference. Purdue University, West Lafayette, Indiana. August 22, 2012.
- Weeks, C. Health impacts in aquaculture. Purdue Veterinary Medicine Conference. Purdue University, West Lafayette, Indiana. August 22, 2012.
- Weeks, C. Is Great Lakes aquaculture a sustainable endeavor? Michigan 4-H Youth Conservation Council Meeting. Greenville, MI. February 2016.
- Weeks, C. 2016. Michigan netpen aquaculture. 2016 North Central Aquaculture Conference. Milwaukee, WI. March 2016.
- Weeks, C. 2016. Michigan netpen aquaculture. Soy Aquaculture Alliance annual meeting. Las Vegas, NV.
- Weeks, C.T. and D. Smith. On the brink of trout cage culture. North Central Aquaculture Conference. Toledo, Ohio February 22-23, 2014.
- Weeks C.T. Opportunities, challenges, and needs for successful aquaculture for north central US aquaculture. Key-note presentation for Ohio Aquaculture Conference. Columbus, Ohio. January 31, 2015.
- March 2016. Weeks, C. 2016. Recirculating aquaculture systems (RAS). 2016 Michigan Seafood Summit. Traverse City Michigan. April 2016
- Weeks, C. 2016. Recirculating aquaculture systems (RAS) economics. State association meetings in Jefferson City, Missouri; Tustin, Michigan; Columbus, Ohio.
- Weeks, C. Regulation impacts on commercial aquaculture in the North Central Region. Wisconsin Aquaculture 2013. Pewaukee, Wisconsin. March 1-2, 2013.
- Weeks, C. Sustainable aquaculture in the NCR (workshop-style presentations). Tri-state conference with OH, IN and KY, Michigan, and Missouri from February – March 2012. C. Weeks 2012.
- Weeks C., N. Phelps and R. Johnson . Are regulations the biggest obstacle to a growing aquaculture industry in the North Central Region of the US? Aquaculture 2013. Nashville, Tennessee. February 22-25, 2013.
- Weeks, C.T. Building Michigan aquaculture strong. 2014 Michigan Aquaculture Association Annual Meeting. Tustin, Michigan. January 23, 2014.
- Weeks, C.T. Designing a flow through raceway system for salmonids – Westers' Design. North Central Aquaculture Conference. Toledo, Ohio. February 22-23, 2014.
- Weeks, C.T. and D. Smith. On the brink of trout cage culture. North Central Aquaculture Conference. Toledo, Ohio. February 22-23, 2014.

APPENDIX

Other Videos

Kayes, T.B., and K. Mathiesen, editors. 1994.

Investing in freshwater aquaculture: a reprise (part I). VHS format, 38 min. Cooperative Extension, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln.

Kayes, T.B., and K. Mathiesen, editors. 1994.

Investing in freshwater aquaculture: a reprise (part II). VHS format, 41 min. Cooperative Extension, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln.

CD-ROMs

Boylan, J., and J. Morris. 2003. Invertebrate identification for fish culturists. NCRAC CD- ROM Series #102, NCRAC Publications Office, Iowa State University, Ames.

Kinnunen, R. 2002. Environmental Strategies for Aquaculture Symposium proceedings. NCRAC CD-ROM Series #101, NCRAC Publications Office, Iowa State University, Ames.

Summerfelt, R.C., and R.D. Clayton. Aquaculture effluents: overview of EPA guidelines and standards & BMPs for ponds, raceways, and recycle systems. NCRAC CD-ROM Series #103, NCRAC Publications Office, Iowa State University, Ames.

Situation and Outlook Report

Hushak, L.J. 1993. North Central Regional aquaculture industry situation and outlook report, volume 1 (revised October 1993). NCRAC Publications Office, Iowa State University, Ames.

Other Publications in Print

Colyn, J., G. Boersen, B. Knudsen and C.T. Weeks.

2014. A strategic plan for a thriving and sustainable Michigan aquaculture; Michigan Sea Grant Integrated Assessment Final Report.

Michigan Sea Grant. Ann Arbor, MI. 120 pp. Available at: http://www.miseagrant.umich.edu/wp-content/blogs.dir/1/files/2012/09/2014-MAA-Strategic-Plan_Final_141215.pdf

Hicks, C. 2012. Two-Year Growth of Sunfish Hybrids in Missouri. World Aquaculture Society Magazine 43(4) 27030.

Hicks, C. E. and R. A. Pierce II. 2012. Converting unused agriculture facilities for aquaculture use: Swine barn conversion for fish culture. University of Missouri Extension G9472, Colombia, Missouri. Available: <http://extension.missouri.edu/p/G9472>. (September 19, 2014).

Hicks, C. E. and R. A. Pierce II. 2012. Freshwater prawn production in Missouri. University of Missouri Extension G9471, Colombia, Missouri. Available: <http://extension.missouri.edu/p/G9471>. (September 19, 2014).

Hicks, C. E. and R. A. Pierce II. 2012. Bluegill sunfish production in Missouri. University of Missouri Extension G9473, Colombia, Missouri. Available: <http://extension.missouri.edu/p/G9473>. (September 19, 2014).

Myers, J.J., and R.A. Pierce. 2000. Missouri aquaculture directory. Missouri Department of Agriculture, Jefferson City, Missouri.

Pierce, R.A., and C. Hicks. 2000. Understanding aquaculture businesses and their financial needs. Pages 75-76 in R. Plain, editor. Missouri farm financial outlook 2001. University Outreach and Extension, Department of Agricultural Economics, University of Missouri-Columbia.

Swann, D.L., and M.E. Einstein. 2000. User analysis and future directions of the web-based Aquaculture Network Information Center. Journal of Extension 38(5).

APPENDIX

Weeks, C. 2005, updated 2010. North Central Region aquaculture contacts, transport regulations, and approved aquatic species. North Central Regional Aquaculture Center (<http://www.ncrac.org/Info/StateImportRegs/stateregsmain.htm>).

Weeks, C., and R. Clayton. 2010. NCR aquaculture roadmap. North Central Regional Aquaculture Center (<http://www.ncrac.org/roadmap/index.htm>).

Weeks C.T. . 2013. Sustainable aquaculture in the north central region US - review of perceptions and recommendations from the aquaculture community. Journal of Extension v51 no.2 - 2COM1. Available online at: <https://joe.org/joe/2013april/comm1.php>

Weeks, C.T., N. Phelps, and R. Kinnunen. 2016a. Feasibility Study, Voluntary Aquatic Invasive Species Prevention Verification for Aquaculture and Baitfish Sectors in the Great Lakes (Submitted to State of Michigan).

Weeks, C.T., N. Phelps, and R. Kinnunen. 2016b. AIS Management in Aquaculture and Baitfish Sectors within the Great Lakes (in final draft).

Yeo, S.E., F.P. Binkowski, and J.E. Morris. 2004. Aquaculture effluents and waste by-products: characteristics, potential recovery and beneficial reuse. NCRAC Publications Office, Iowa State University, Ames.

Digital Publications

2012 eXtension Virtual Aquaculture Workshop, Walleye Culture, Recorded November 12-15, 2012. <http://www.extension.org/pages/66298/2012-extension-virtual-aquaculture-workshop#.VMpcFGjF98E>

2012 Hicks, C. E. and Hartleb, C. Least Cost Diet Test for Bluegill Sunfish. Aquaculture Research . DOI: 10.1111/are.12263. Available: <https://www.youtube.com/watch?v=ZrKDmXmjw1M> (May 10, 2013).

Popular Articles

HOtv – Agribusiness Report – Growing Crops in Water –Aired October 2, 2013. <http://whotv.com/2013/10/02/agribusiness-growing-crops-in-water/>

Iowa Public Television – Market to Market – Closed- Loop Aquaponics Growing System Combines Land and Lake – Aired September 20, 2013. http://www.iptv.org/mtom/story.cfm/feature/10981/mtom_20130920_3904_feature

Peer-reviewed

Colyn, J., G. Boersen, B. Knudsen and C.T. Weeks (ed). 2014. A strategic plan for a thriving and sustainable Michigan aquaculture; Michigan Sea Grant Integrated Assessment Final Report. Michigan Sea Grant, Ann Arbor, MI.

Quagraine, K. A Guide to Marketing for Small- Scale Aquaculture Producers. 2014 (Available: http://www.iisgcp.org/catalog/download_09/EC-738_Aqua.pdf)

Quagraine, K. Profitability of Indoor Production of Pacific White Shrimp (*Litopenaeus vannamei*): A Case Study of the Indiana Industry. 2015 (<https://extension.purdue.edu/extmedia/EC/EC-797-W.pdf>)

Quagraine, K. Profitability of Hybrid Striped Bass Cage Aquaculture in the Midwest. 2015 (https://www.edustore.purdue.edu/item.asp?Item_Number=EC-798-W#.VpbAFcYrK70)

Pattillo, D.A. *In Review*. An Overview of Aquaponic Systems: Hydroponic Components. North Central Regional Aquaculture Center Pub # XXX.

APPENDIX

Pattillo, D.A. *In Review*. An Overview of Aquaponic Systems: Aquaculture Components. North Central Regional Aquaculture Center Pub # XXX.

Weeks C.T. 2013. Sustainable aquaculture in the north central region US - review of perceptions and recommendations from the aquaculture community. *Journal of Extension* v51 no.2 - 2COM1.

Workshops/Conferences/Symposia/Papers Presented

1st National Aquaculture Extension Workshop, Ferndale, Arkansas, March 3-7, 1992. (Joseph E. Morris, Steering Committee)

1st North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991. (Donald L. Garling, Lead; David J. Landkamer, Joseph E. Morris and Ronald Kinnunen, Steering Committee)

2nd North Central Regional Aquaculture Conference, Minneapolis, Minnesota, February 17-18, 1995. (Jeffrey L. Gunderson, Lead; Fred P. Binkowski, Donald L. Garling, Terrence B. Kayes, Ronald D. Kinnunen, Joseph E. Morris, and LaDon Swann, Steering Committee)

3rd North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997. (LaDon Swann)

4th North Central Regional Aquaculture Conference, Columbia, Missouri, February 24-26, 1999. (Robert A. Pierce and Joseph E. Morris).

AIS-HACCP Training Workshop, American Fisheries Society Annual Conference, Lake Placid, New York, September 10, 2006. (Ronald E. Kinnunen)

AIS-HACCP Train-the-Trainer Workshop, Columbus, Ohio, February 9, 2007. (Ronald E. Kinnunen and Jeff Gunderson)

ANS-HACCP Approach: Reducing the Risk of Spreading Aquatic Nuisance Species, Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003. (Ronald E. Kinnunen)

AIS-HACCP Training Workshop, Clare, Michigan, July 30, 2007. (Ronald E. Kinnunen)

AIS-HACCP Training Workshop, Rogers, Minnesota, September 6, 2007. (Ronald E. Kinnunen and Jeff Gunderson)

AIS-HACCP Training Workshop, Stevens Point, Wisconsin, October 26, 2007. (Ronald E. Kinnunen and Phil Moy)

AIS-HACCP Training Workshop, Pierre, South Dakota, January 4, 2008. (Ronald E. Kinnunen and Jeff Gunderson)

AIS-HACCP Use in the Baitfish and Aquaculture Industries, Organisms in Trade Workshop, Great Lakes Commission, Romulus, Michigan, June 10, 2008. (Ronald E. Kinnunen)

AIS-HACCP Training Workshop, Indianapolis, Indiana, July 23, 2008. (Ronald E. Kinnunen and Kristin TePas)

AIS-HACCP Training Workshop, Ashland, Nebraska, October 15, 2009. (Ronald E. Kinnunen and Richard Clayton)

AIS-HACCP Training Workshop, Spirit Lake, Iowa, June 16, 2010. (Ronald E. Kinnunen and Joseph Morris)

APPENDIX

-
- American Fisheries Society Annual Conference, North Central Regional Aquaculture Center VHS Project, St. Paul, Minnesota, August 20, 2012. (R.E. Kinnunen, M.P. Gaikowski, M.T. Tuttle-Lau, J.J. Rach, J.A. Malison, J.A. Held, R.E. Johnson, S.E. Kaatz, G.D. Dvorak)
- American Fisheries Society Fish Health Section Annual Conference, North Central Regional Aquaculture Center VHS Project, La Crosse, Wisconsin, August 1, 2012. (R. E. Kinnunen, M.P. Gaikowski, M.T. Tuttle-Lau, J.J. Rach, J.A. Malison, J.A. Held, R.E. Johnson, S.E. Kaatz, G.D. Dvorak)
- An Overview of Aquaculture. NCR-SARE Aquaculture, Hydroponics, and Aquaponics Train the Trainer Workshop. September 3, 2014. (D. A. Pattillo)
- Applications of HACCP in Aquaculture, Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003. (Ronald E. Kinnunen)
- Aquaculture in the Age of the Information Highway (World Aquaculture Society special session), San Diego, California, February 7, 1995. (LaDon Swann)
- Aquaculture in the Age of the Information Highway. Multimedia session, 18 month meeting of the Sea Grant Great Lakes Network, Niagara Falls, Ontario, May 6, 1995. (LaDon Swann)
- AquaNIC. Annual Meeting of the Aquaculture Association of Canada, Nanaimo, British Columbia, June 5, 1995. (LaDon Swann)
- Aquaculture Biosecurity/AIS-HACCP Workshop, Ellendale, Minnesota, July 12, 2012. (Ronald E. Kinnunen and Nick Phelps)
- Aquaculture Biosecurity/AIS-HACCP Workshop, La Crosse, Wisconsin, July 30, 2012. (Ronald E. Kinnunen and Nick Phelps)
- Aquaculture Biosecurity/AIS-HACCP Workshop, Dundee, Michigan, August 6, 2012. (Ronald E. Kinnunen and Chris Weeks)
- Aquaculture Field Day, Lincoln University Carver Farm, Missouri, October 2004. (Robert A. Pierce)
- Aquaculture in Michigan – A Brief Overview of Status, Regulatory Structures and Impacting Factor, Lansing, Michigan, January 22, 2010. (Christopher T. Weeks)
- Aquaculture Leader Training for Great Lakes Sea Grant Extension Agents, Manitowoc, Wisconsin, October 23, 1990. (David J. Landkamer and LaDon Swann)
- Aquaculture Leader Training, Alexandria, Minnesota, March 6, 1993. (Jeffrey L. Gunderson and Joseph E. Morris)
- Aquaculture Overview, National Farm and Ranch Business Management Education Association Annual Conference, Wooster, Ohio, June 13, 2005. (Laura G. Tiu)
- Aquaponics System Design and Management. Tristate Forestry Conference. March 8, 2014. (D. A. Pattillo) (http://www.extension.iastate.edu/forestry/tristate/tristate_2014/talks/PDFs/Aquaponic_System_Design_and_Management.pdf) Aquaculture: Technical Issues – SOP Considerations (2014) Available: https://www.youtube.com/watch?v=mu6FbnGDIHc&feature=youtu.be&list=PLm_vGnzBqbDXyYPb7YRcORn2i4_tEE2nbT Aquaculture: Market and Industry Trends Panel (2014) Available: <https://www.youtube.com/watch?v=T->

APPENDIX

L8Z4x4MW0&feature=youtu.be&list=PLmvGn zBqbDXyYPb7YRcORn2i4_tEE2nbT\)

Aquaponics System Design and Management. NCR- SARE Aquaculture, Hydroponics, and Aquaponics Train the Trainer Workshop.
September 3, 2014. (D. A. Pattillo)

Aquaponics System Design and Management. North Central Regional Aquaculture Conference March 12, 2016.
Pattillo, D. A. Iowa State University. Available: http://www.ncrac.org/files/presentation/file/Aquaponic%20System%20Design%20and%20Management_Pattillo.pdf Accessed 11/4/2016.

Baitfish Regulations and State Industry Contacts, NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010. (Christopher T. Weeks)

Biosecurity and VHS Virus Update, NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010. (Ronald E. Kinnunen)

Certified Pesticide Applicators Workshop, Aquatic Plant Identification and Control, Wetmore, Michigan, March 19, 2010. (Ronald E. Kinnunen and Jim Islieb)

Channel Catfish Culture in Midwestern Plastic-Lined Ponds, American Fisheries Society Annual Meeting, Madison, Wisconsin, August 25, 2004. (Joseph E. Morris)

Commercial Aquaculture Recirculation Systems, Piketon, Ohio, July 10, 1993. (James E. Ebeling)

Conversion of Livestock Barns into Fish Production Facilities IP Videoconference, Purdue University, West Lafayette, Indiana, March 8, 2007. (Kwamena K. Quagrainie)

Crayfish Symposium, Carbondale, Illinois, March 23-24, 1991. (Daniel A. Selock and Christopher C. Kohler)

Deliverables for NCRAC Funded Projects. 2013 NCRAC Annual Meeting, February 18, 2013.

Description of the Aquaculture and Bait Fish Industries: Threat Evaluation and Identification of Critical Control Points, International Joint Commission Workshop on Exotic Policy, Milwaukee, Wisconsin, September 22-26, 1999. (Jeffrey L. Gunderson)

Early Spawning and Associated Laboratory Practices of Golden Shiners, NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010. (Joseph E. Morris)

Economics of Aquaculture Production. North Central Regional Aquaculture Conference March 12, 2016.
Quagrainie, K. Purdue University.
Available: <http://www.ncrac.org/files/presentation/file/Aquaculture%20Economics%20Quagrainie.pdf>
Accessed 11/4/2016.

Extension Program Assessment: An Extension Specialist's View, 3rd National Aquaculture Extension Conference, Tucson, Arizona, April 7- 11, 2003. (Joseph E. Morris)

Extension Programming in the North Central Region, SERA-IEG-9, Frankfort, Kentucky, March 14- 16, 1999. (Joseph E. Morris)

Fish Health: What you need to know (about regulatory inspections). North Central Regional Aquaculture Conference March 12, 2016.
Phelps, N. University of Minnesota. Available: <http://www.ncrac.org/files/presentation/file/Fish%20Health%20What%20you%20need%20to%20know%20Phelps.pdf> Accessed 11/4/2016.

APPENDIX

-
- Fish Transportation Workshops, Marion, Illinois, April 6, 1991 and West Lafayette, Indiana, April 20, 1991. (LaDon Swann and Daniel A. Selock)
- Fisheries Management in the North Central Region, 9th National Extension Wildlife, Fisheries, and Aquaculture Conference, Portland, Maine, September 29-October 2, 1999. (Joseph E. Morris, and S.K. Whitcomb)
- Food Safety Issues Related to Aquaculture, Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003. (Ronald E. Kinnunen)
- Freshwater Prawn Production Workshop, Sellersburg, Indiana, April 14, 2007. (Kwamena K. Quagraine)
- Great Lakes Native American Involvement in Fisheries Extension Programs, 3rd National Aquaculture Extension Conference, Tucson, Arizona, April 7-11, 2003. (Ronald E. Kinnunen and Charles Pistis)
- Great Lakes Native American Involvement in Fisheries Extension Programs, American Fisheries Society Annual Meeting, Madison, Wisconsin, August 25, 2004. (Ronald E. Kinnunen)
- Great Lakes Native American Involvement in Fisheries Extension Programs, International Association of Great Lakes Research Conference, Ann Arbor, Michigan, May 24, 2005. (Ronald E. Kinnunen and Charles Pistis)
- Growing Power Conference, Fish Processing, Milwaukee, Wisconsin, September 11, 2010. (Ronald E. Kinnunen)
- HACCP Approach to Prevent the Spread Of Aquatic Invasive Species by Aquaculture and Baitfish Operations, 4th National Aquaculture Extension Conference, Cincinnati, Ohio, May 1-3, 2007. (Ronald E. Kinnunen)
- HACCP Approach to Prevent the Spread of Aquatic Invasive Species by Aquaculture and Baitfish Operations, 92nd Annual Meeting and Professional Improvement Conference, Association of County Agricultural Agents, Grand Rapids, Michigan, July 17, 2007. (Ronald E. Kinnunen)
- Hazard Analysis Critical Control Point (HACCP) Training for Commercial Fish Processors (poster), International Association of Great Lakes Research Conference, Ann Arbor, Michigan, May 24, 2005. (Ronald E. Kinnunen)
- Hybrid Walleye Workshop, Jackson, Missouri, March 5, 2003. (Ronald E. Kinnunen and Robert A. Pierce II)
- In-Service Training for CES and Sea Grant Personnel, Gretna, Nebraska, February 9, 1993. (Terrence B. Kayes and Joseph E. Morris)
- International Conference on Aquatic Invasive Species, The HACCP Approach to Prevent the Spread of Aquatic Invasive Species by Aquaculture and Baitfish Operations, Niagara Falls, Ontario, April 24, 2013. (R. E. Kinnunen and J. Gunderson)
- Internet Resources for Aquaculture Education and Communications: Present and Future, 9th National Extension Wildlife, Fisheries, and Aquaculture Conference, Portland, Maine, September 29-October 2, 1999. (LaDon Swann)
- Interstate Movement of Live Fish Regulations in the North Central U.S., Workshop for Veterinarians, Frankfort, Indiana, September 30, 2010. (Christopher T. Weeks)
- Introduction to Recirculating Aquaculture Workshop, Bellevue, Ohio, March 20, 2004. (Laura G. Tiu)
- Interstate Movement of Live Fish Regulations in the North Central U.S., Workshop for Veterinarians, Madison, Wisconsin, April 26-27, 2010. (Christopher T. Weeks)

APPENDIX

Investing in Freshwater Aquaculture, Satellite Videoconference, Purdue University, April 10, 1993. (LaDon Swann)

Live Haul Aquaculture Marketing & Advantages of Collective Sales. North Central Regional Aquaculture Conference March 12, 2016.

Hitchens, P. Southern Illinois University – Carbondale. Available: <http://www.ncrac.org/files/presentation/file/Live%20Haul%20Marketing%20%26%20Collective%20Sales%2C%20Hitchens.pdf> Accessed 11/4/2016.

Logic Model and Impact Statements for NCRAC. 2013 NCRAC Annual Meeting. February 18, 2013. (J. E. Morris, S. Brown and D.A. Pattillo)

Marketing for Aquaculture. 2013 NCRAC Annual Meeting, February 18, 2013. (D. Burden and D. A. Pattillo)

MarketMaker, Michigan Aquaculture Association Annual Conference, Clare, Michigan, February 12, 2008. (Ronald E. Kinnunen)

Michigan Aquaculture Association, Aquaculture Biosecurity/AIS-HACCP Update, Mt. Pleasant, Michigan, February 25, 2010. (Ronald E. Kinnunen)

Michigan Aquaculture and Salmonid Aquaculture in the North Central Region, Great Lakes Sea Grant Network Conference, Chicago, Illinois, September 18, 2007. (Ronald E. Kinnunen)

Michigan Aquaculture Association Annual Conference, Aquaculture Biosecurity/AIS- HACCP/Seafood HACCP/Fish Processing and Marketing, Tustin, Michigan, February 7, 2012 (Ronald E. Kinnunen)

Midwest Regional Cage Fish Culture Workshop, Jasper, Indiana, August 24-25, 1990. (LaDon Swann)

Missouri Aquaculture – Status, Progress, Priorities, Information Access and Concerns. Missouri Aquaculture Association Annual Meeting, Lincoln University Carver Farm, January 10, 2011. (Christopher T. Weeks)

National Extension Wildlife and Fisheries Workshop, Kansas City, Missouri, April 29-May 2, 1993. (Joseph E. Morris)

NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010. (Jeff Gunderson, Joseph E. Morris and Ronald E. Kinnunen)

Netpen Aquaculture. North Central Regional Aquaculture Conference March 12, 2016. Weeks, C. Michigan State University. Available: <http://www.ncrac.org/files/presentation/file/Michigan%20Netpen%20Aquaculture%2C%20Weeks.pdf> Accessed 11/4/2016.

North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995. (Christopher C. Kohler, LaDon Swann, and Joseph E. Morris)

North Central Regional Aquaculture Center VHS Project, Michigan Aquaculture Association Annual Conference, Clare, Michigan, February 12, 2008. (Ronald E. Kinnunen)

North Central Regional Aquaculture Center Seeks Input from the Missouri Aquaculture Industry, Missouri Aquaculture Association Meeting and Biosecurity Workshop, Jefferson City, Missouri, January 23, 2009. (Christopher T. Weeks)

Ohio State University Bluegill Aquaculture Workshop, Columbus, Ohio, February 11, 2011. (Charles Hicks, Laura

APPENDIX

Tiu)

On Farm Demonstration of Freshwater Shrimp Culture in Southern Ohio, 3rd National Aquaculture Extension Conference, Tucson, Arizona, April 7-11, 2003. (Laura G. Tiu)

Online fish health program for fish farmers. The 35th Annual Eastern Fish Health Workshop, Shepherdstown, Shepherdstown, West Virginia, May 24-28, 2010. (Myron J. Kebus)

Organic Aquaculture Standards Workshop, Minneapolis, Minnesota, June 23-24, 2000. (Anne R. Kapuscinski)

Overviews on Production, Nutrition, Economics, and Fish Health Management for Yellow Perch, *Perca flavescens*, Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003. (Fred P. Binkowski, Ronald E. Kinnunen, and Geoffrey Wallat)

Pond Fertilization Strategies for Northern Climates, NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010. (Joseph E. Morris)

Potential Recovery and Beneficial Use of Aquaculture Effluents and Waste By-Products, Aquaculture 2004, Honolulu, Hawaii, March 1- 4, 2004. (Joseph E. Morris and Fred P. Binkowski)

Power Conference, Fish Handling, Processing, Seafood HACCP, and Fish Marketing, Milwaukee, Wisconsin, September 8, 2012.

Rainbow Trout Production: Indoors/Outdoors, Piketon, Ohio, July 8, 1995. (James E. Ebeling)

Regional Workshop on Commercial Fish Culture Using Water Recirculating Systems, Normal, Illinois, November 15-16, 1991. (LaDon Swann)

Regional Workshop of Commercial Fish Culture Using Water Reuse Systems, Normal, Illinois, November 2-3, 1990. (LaDon Swann)

Regional Workshop on Commercial Fish Culture Using Water Recirculating Systems, Normal, Illinois, November 19-20, 1992. (LaDon Swann)

Salmonid Culture, East Lansing, Michigan, March 23-24, 1990. (Donald L. Garling)

Seafood HACCP Training Workshop, Bay Mills, Michigan, December 9-11, 2008. (Ronald E. Kinnunen)

Seafood HACCP Training Workshop, Baraga, Michigan, February 15-18, 2011. (Ronald E. Kinnunen)

Seafood HACCP Training Workshop, Baraga, Michigan, December 10-12, 2013. (Ronald E. Kinnunen)

Seafood HACCP Training Workshop, Bay Mills, Michigan, March 9-11, 2010. (Ronald E. Kinnunen)

Seafood HACCP Training Workshop, Bay Mills, Michigan, December 4-6, 2012.

Seafood HACCP Training Workshop, Petoskey, Michigan, December 6-8, 2011. (Ronald E. Kinnunen)

The Role of the North Central Regional Aquaculture Center in Addressing Challenges Facing Regional Aquaculture Development Using Extension and Research Partnerships. Aquaculture 2013, Nashville, TN. February 24, 2013. (J.E. Morris, D.A. Pattillo and C. Weeks)

Tri-State Aquaculture Conference/Workshop. Ashland, Nebraska, March 17, 2007. (Fred B. Binkowski and Joseph E. Morris)

APPENDIX

- Upper Midwest Invasive Species Conference, Aquatic and Terrestrial Invasive Species-Hazard Analysis Critical Control Point (HAACP) Workshop, La Crosse, Wisconsin, October 29, 2012.
- Use of Natural Ponds for Fish and Baitfish Production, Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003. (Ronald E. Kinnunen)
- Using Sensory Analysis to Better Position a Fish Product in the Market Place, 4th National Aquaculture Extension Conference, Cincinnati, Ohio, May 1-3, 2007. (Ronald E. Kinnunen)
- VHS Virus in the Great Lakes Region, 92nd Annual Meeting and Professional Improvement Conference, National Association of County Agricultural Agents, Grand Rapids, Michigan, July 17, 2007. (Ronald E. Kinnunen)
- VHS: a Regional Industry Perspective, Illinois VHS Conference and Workshop, Rend Lake, Indiana, April 26, 2008 (Christopher T. Weeks)
- Yellow Perch and Hybrid Striped Bass Aquaculture Workshop, Piketon, Ohio, July 9, 1994. (James E. Ebeling and Christopher C. Kohler)
- Walleye Culture. 2012 eXtension Virtual Aquaculture Workshop. November 14, 2012.
[http://www.extension.org/sites/default/files/Wall eye_Culture_Pattillo_eXtension_11-2012.pdf](http://www.extension.org/sites/default/files/Wall%20eye_Culture_Pattillo_eXtension_11-2012.pdf)
- Workshop on Getting Started in Commercial Aquaculture Raising Crayfish and Yellow Perch, Jasper, Indiana, October 14-15, 1994. (LaDon Swann)
- Walleye Culture Workshop, Minneapolis, Minnesota, February 17-18, 1995. (Jeffrey L. Gunderson)
- Why AIS-HACCP? Overview and Rationale, International Association of Great Lakes Research Conference, Ann Arbor, Michigan, May 24, 2005. (Ronald E. Kinnunen and Jeffery L. Gunderson)
- Why Aquaponics? FarmTek's Fall 2013 Controlled Environment Agriculture School. (D. A. Pattillo)
- Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995. (Donald L. Garling)
- Yellow Perch Producers' Forum, Hudson, Wisconsin, January 21-22, 2000. (Joseph E. Morris and Jeffrey L. Gunderson)
- Yellow Perch Aquaculture Workshop, Bad River Tribal Hatchery Program, Milwaukee, Wisconsin, December 2004. (Fred P. Binkowski)
- Yellow Perch and Lake Sturgeon Workshop, Lac du Flambeau Tribal Hatchery, Milwaukee, Wisconsin, February 2005. (Fred P. Binkowski)
- Yellow Perch Aquaculture Workshop, Kearney, Nebraska, February 26, 2005. (Fred B. Binkowski)
- Yellow Perch Spawning Workshop, Milwaukee, Wisconsin, November 2, 2006. (Fred B. Binkowski).
- Proceedings**
- Gunderson, J., editor. 1995. Proceedings of the Combined North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow. 2nd North Central Regional Aquaculture Conference, Minneapolis, Minnesota, February 17-18, 1995.
- Morris, J.E., editor. 1999. Aquaculture at the crossroads: linking the past to the future. Compilation of abstracts, papers, and supporting articles for the 4th North Central Regional Aquaculture Conference, Columbia, Missouri, February 24-26, 1999.

APPENDIX

Proceedings of the North Central Regional Aquaculture Conference. 1991. 1st North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.

Swann, L., editor. 1997. Proceedings of the 1997 North Central Regional Aquaculture Conference. 3rd North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997. Illinois-Indiana Sea Grant Program, Publication CES-305. (Also available electronically at: <http://ag.ansc.purdue.edu/aquanic/publicat/state/il-in/ces-305.htm>)

FEED TRAINING CARNIVOROUS FISH

Publication in Print

Sims, D.W. 2007. Effects of feed training methods and light intensity on survival and feed training success of largemouth bass *Micropterus salmoides* and effectiveness of new bird repellent devices in a commercial aquaculture setting. Master's thesis. Southern Illinois University- Carbondale.

Paper Presented

Sims, D.W., and A.M. Kelly. 2007. Effects of different feed training methods on survival and feed training success of largemouth bass *Micropterus salmoides*. Aquaculture America 2007, San Antonio, Texas, February 26-March 2, 2007.

HYBRID STRIPED BASS

Publications in Print

Allyn, M.L., R.J. Sheehan, and C.C. Kohler. 2001. The effects of capture and transportation stress on white bass semen osmolality and their alleviation via sodium chloride. Transactions of the American Fisheries Society 130:706-711.

Anonymous. 1995. Proceedings of the NCRAC Hybrid Striped Bass Workshop. NCRAC Publications Office, Iowa State University, Ames.

Brown, P.B., R. Twibell, Y. Jonker, and K.A. Wilson. 1997. Evaluation of three soybean products in diets fed to juvenile hybrid striped bass *Morone saxatilis* H M. *chrysops*. Journal of the World Aquaculture Society 28:215-223.

Brown, P.B., B.J. Brown, S. Hart, J. Curry, and A. Hittle-Hutson. 2008. Comparison of soybean-based practical diets containing 32, 36, or 40% crude protein fed to hybrid striped bass in earthen culture ponds. North American Journal of Aquaculture 70:128-131.

Kasper, C.S., and C.C. Kohler. 2004. Use of finishing diets in indoor hybrid striped bass culture reduces production costs. Pages 507-513 in T. Rakestraw, L.S. Douglas, and G.J. Flick, editors.

Proceedings of the Fifth International Conference on Recirculating Aquaculture. Virginia Polytechnic Institute and State University, Roanoke, Virginia.

Kelly, A.M., and C.C. Kohler. 1996. Sunshine bass performance in ponds, cages, and indoor tanks. Progressive Fish-Culturist 58:55-58.

Kelly, A.M., and C.C. Kohler. 1999. Cold tolerance and fatty acid composition in striped bass, white bass and their

APPENDIX

- hybrids. *North American Journal of Aquaculture* 61:278-285.
- Kemeh, S., and P.B. Brown. 2001. Evaluation of different stocking densities for hybrid striped bass in small-scale recirculation systems. *North American Journal of Aquaculture* 63:234-237.
- Kohler, C.C. 1997. White bass production and broodstock development. Pages 169-185 in R.M. Harrell, editor. *Striped bass and other *Morone* culture*. Elsevier Press, Amsterdam.
- Kohler, C.C. 2000. Striped bass and hybrid striped bass culture. Pages 898-907 in R.R. Stickney, editor. *Encyclopedia of aquaculture*. John Wiley & Sons, Inc., New York.
- Kohler, C.C., R.J. Sheehan, C. Habicht, J.A. Malison, and T.B. Kayes. 1994. Habituation to captivity and controlled spawning of white bass. *Transactions of the American Fisheries Society* 123:964-974.
- Kohler, C.C., R.J. Sheehan, J.J. Myers, J.B. Rudacille, M.L. Allyn, and A.V. Suresh. 2001. Performance comparison of geographic strains of white bass (*Morone chrysops*) to produce sunshine bass. *Aquaculture* 202:351-357.
- Lane, R.L., and C.C. Kohler. 2006. Effects of dietary lipid and fatty acids on white bass reproductive performance, egg hatchability, and overall quality of progeny. *North American Journal of Aquaculture* 68:141-150.
- Lane, R.L., and C.C. Kohler. 2007. Influence of organic fertilizer source on fatty acid composition of zooplankton and sunshine bass fingerlings. *North American Journal of Aquaculture* 69:413-418.
- Lane, R.L., J.T. Trushenski, and C.C. Kohler. 2006. Modification of fillet composition and evidence of differential fatty acid turnover in sunshine bass *Morone chrysops* × *M. saxatilis* following change in dietary lipid source. *Lipids* 41:1029-1038.
- Lewis, H.A., and C.C. Kohler. 2008. Corn gluten meal partially replaces fish meal without compromising growth or fatty acid composition of sunshine bass. *North American Journal of Aquaculture* 70:50-60.
- Lewis, H.A., and C.C. Kohler. 2008. Minimizing fish oil and fish meal with plant-based alternatives in sunshine bass diets without negatively impacting growth and muscle fatty acid profile. *Journal of the World Aquaculture Society* 39:573-585.
- Morris, J.E., C.C. Kohler, and C.C. Mischke. 1999. Pond culture of hybrid striped bass in the North Central Region. NCRAC Fact Sheet Series #107, NCRAC Publications Office, Iowa State University, Ames.
- Myers, J.J. 1999. Acute responses to salinity for sunshine bass and palmetto bass. Master's thesis. Southern Illinois University-Carbondale.
- Myers, J.J., and C.C. Kohler. 2000. Acute responses to salinity for sunshine bass and palmetto bass. *North American Journal of Aquaculture* 62:195-202.
- Rudacille, J.B., and C.C. Kohler. 2000. Aquaculture performance comparison of sunshine bass, palmetto bass, and white bass. *North American Journal of Aquaculture* 62:114-124.
- Settor, K. 1998. Evaluation of different densities for hybrid striped bass (*Morone saxatilis* HM. *chrysops*) in cages and small-scale recirculation system. Master's thesis. Purdue University, West Lafayette, Indiana.
- Suresh, A.V., J.B. Rudacille, M.L. Allyn, V. Sheehan, R.J. Sheehan, and C.C. Kohler. 2000. Single injections of human chorionic gonadotropin or mammalian gonadotropin releasing hormone analog at low dosages induce ovulation in white bass. *North American Journal of Aquaculture* 62:87-94.

APPENDIX

-
- Trushenski, J.T., and C.C. Kohler. 2006. Evaluation of natural source vitamin E, d-alpha tocopheryl acetate, as a micronutrient in sunshine bass feed. *North American Journal of Aquaculture* 68:186- 191.
- Trushenski, J.T., C.S. Kaspar, and C.C. Kohler. 2006. Challenges and opportunities in finfish nutrition. *North American Journal of Aquaculture* 68:122- 140.
- Trushenski, J.T., and C.C. Kohler. 2007. Influence of stress and dietary natural source vitamin E on nonspecific immunocompetence, tissue tocopherol composition, and postslaughter fillet oxidative stability of sunshine bass. *North American Journal of Aquaculture* 69:330-339.
- Trushenski, J.T., and C.C. Kohler. Influence of stress, exertion, and dietary natural source vitamin E on prostaglandin synthesis, hematology, and tissue fatty acid composition of sunshine. *North American Journal of Aquaculture* 70:251-265.
- Volkman, E.T., C.C. Kohler, and S.T. Kohler. 2004. Assessment of floating vertical raceways for the culture of phase-II hybrid striped bass. *North American Journal of Aquaculture* 66:125-132.
- Wetzel, J.E., C.C. Kasper and C.C. Kohler. 2006. Comparison of pond production of phase-III sunshine bass fed 32-, 36-, and 40%-crude- protein diets with fixed energy:protein ratios. *North American Journal of Aquaculture* 68:264- 270.
- Woods, L.C., C.C. Kohler, R.J. Sheehan, and C.V. Sullivan. 1995. Volitional tank spawning of female striped bass with male white bass produces hybrid offspring. *Transactions of the American Fisheries Society* 124:628-632.
- Papers Presented**
- Brown, B.J., P.B. Brown, S. Hart, J. Curry, and A. Hittle-Hutson. 2005. Comparison of practical diets containing 32, 36, or 40% crude protein fed to hybrid striped bass in earthen culture ponds. *Aquaculture America 2005*, New Orleans, Louisiana, January 20, 2005.
- Brown, P.B., R. Twibell, Y. Hodgin, and K. Wilson. 1995. Soybeans in diets fed to hybrid striped bass. 24th Annual Fish Feed and Nutrition Workshop, Columbus, Ohio, October 19-21, 1995.
- Brown, P.B., Y. Hodgin, R. Twibell, and K.A. Wilson. 1996. Use of three soybean products in diets fed to hybrid striped bass. 27th Annual Meeting of the World Aquaculture Society, Bangkok, Thailand, January 29-February 2, 1996.
- Brown, G.G., L.D. Brown, K. Dunbar, C. Habicht, R.J. Sheehan, C.C. Kohler, and L. Koutnik. 1991. Evaluation of white bass semen with 31P- NMR for the improvement of transportation, storage, and fertility methods. 53rd Midwest Fish and Wildlife Conference, Des Moines, Iowa, November 30-December 4, 1991.
- Brown, G.G., R.J. Sheehan, C.C. Kohler, C. Habicht, L. Koutnik, L. Ellis, and L.D. Brown. 1995. Use of cryopreservatives. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Brown, G.G., R.J. Sheehan, C.C. Kohler, C. Habicht, L. Koutnik, L. Ellis, and L.D. Brown. 1998. Short-term storage of striped bass *Morone saxatilis* semen. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Habicht, C., R.J. Sheehan, C.C. Kohler, G.G. Brown, and L. Koutnik. 1991. Routine collection, storage, and shipping of white bass sperm. 29th Annual Meeting Illinois Chapter of the American Fisheries Society, Champaign, Illinois, March 5- 7, 1991.

APPENDIX

-
- Kasper, C.S., and C.C. Kohler. 2004. Use of finishing diets in indoor hybrid striped bass culture reduces production costs. Fifth International Conference on Recirculating Aquaculture, Roanoke, Virginia, July 22-25, 2004.
- Kohler, C.C. 1993. The farm fish of the future: hybrid stripers. Aqua >93: 7th Annual Minnesota Aquaculture Conference, Alexandria, Minnesota, March 5-6, 1993. (Invited paper)
- Kohler, C.C. 1994. Hybrid striped bass aquaculture.
Yellow Perch and Hybrid Striped Bass Production: From Fry to Frying Pan, Piketon, Ohio, July 3, 1994. (Invited speaker)
- Kohler, C.C. 1995. Broodstock management of white bass. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Kohler, C.C. 1996. Induced out-of-season spawning of fishes. Missouri Aquaculture Industry Association Annual Meeting, Jefferson City, Missouri, February 3-4, 1996.
- Kohler, C.C. 1996. Advancing hybrid striped bass culture in the North Central Region and elsewhere. U.S. Chapter of the World Aquaculture Society, Arlington, Texas, February 14-17, 1996.
- Kohler, C.C. 1997. Induced spawning of fishes. Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Kohler, C.C. 1998. Hybrid striped bass culture in the Midwest. Joint Missouri-Kansas Aquaculture Conference, Springfield, Missouri, March 4-6, 1998.
- Kohler, C.C., and R.J. Sheehan. 1991. Hybrid striped bass culture in the North Central Region. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Kohler, C.C., R.J. Sheehan, and T.B. Kayes. 1989. Advancing hybrid striped bass culture in the Midwestern United States. 51st Midwest Fish and Wildlife Conference, Springfield, Illinois, December 5-6, 1989.
- Kohler, C.C., R.J. Sheehan, V. Sanchez, and A. Suresh. 1994. Evaluation of various dosages of hCG to induce final oocyte maturation and ovulation in white bass. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Kohler, C.C., R.J. Sheehan, M.L. Allyn, J.B. Rudacille, and A. Suresh. 1996. Controlled spawning of white bass. U.S. Chapter of the World Aquaculture Society, Arlington, Texas, February 14-17, 1996.
- Kohler, C.C., R.J. Sheehan, C. Habicht, J.A. Malison, and T.B. Kayes. 1992. Acclimation to captivity and out-of-season spawning of white bass. 23rd
Annual Meeting of the World Aquaculture Society, Orlando, Florida, May 21-25, 1992.
- Kohler, C.C., R.J. Sheehan, A. Suresh, L. Allyn, and J. Rudacille. 1996. Effect of hCG dosage on hatching success in white bass. International Congress on the Biology of Fishes, San Francisco, California, July 15-18, 1996.
- Kohler, C.C., R.J. Sheehan, J.J. Myers, J.B. Rudacille, M.L. Allyn, and A.V. Suresh. 1998. Performance comparison of geographically distinct strains of white bass to produce sunshine bass. Striper 2000, College Park, Maryland, June 6-7, 1998.

APPENDIX

- Kohler, C.C., R.J. Sheehan, C. Habicht, V. Sanchez, J.A. Malison, and T.B. Kayes. 1992. Collection, acclimation to captivity, and out-of-season spawning of white bass. 122nd Annual Meeting of the American Fisheries Society, Rapid City, South Dakota, September 14-17, 1992.
- Kohler, C.C., R.J. Sheehan, C. Habicht, V. Sanchez, J.A. Malison, and T.B. Kayes. 1993. Development of white bass brood stock and spawning protocol. U.S. Chapter of the World Aquaculture Society, Hilton Head Island, South Carolina, January 27-30, 1993. (Invited paper)
- Kohler, C.C., R.J. Sheehan, J.J. Myers, J.B. Rudacille, M.L. Allyn, and A.V. Suresh. 1999. Performance comparison of geographically distinct strains of white bass to produce sunshine bass. Aquaculture America 99, Tampa, Florida, January 27-30, 1999.
- Kohler, C.C., R.J. Sheehan, C. Habicht, V. Sanchez, J. Finck, J.A. Malison, and T.B. Kayes. 1991. Domestication and out-of-season spawning of white bass. 53rd Midwest Fish and Wildlife Conference, Des Moines, Iowa, November 30- December 4, 1991.
- Kohler, S.T. 1995. Cost of production. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Koutnik, L.A., R.J. Sheehan, C.C. Kohler, C. Habicht, and G.G. Brown. 1992. Motility and fertility of extended and cryopreserved *Morone* sperm: when is cryopreservation the best option? Annual Meeting, Illinois/Wisconsin Chapters of the American Fisheries Society, Waukegan, Illinois, February 10-13, 1992. (Awarded Best Student Paper)
- Lane, R.L., and C.C. Kohler. 2005. Fingerling production of sunshine bass *Morone chrysops* H *M. saxatilis* in ponds: past, present, future. Aquaculture America 2005, New Orleans, Louisiana, January 19, 2005.
- Lane, R.L., and C.C. Kohler. 2005. Effect of graded levels of long-chain polyunsaturated fatty acids in white bass *Morone chrysops* broodstock diets on reproductive success, egg hatchability, and larval survival. Aquaculture America 2005, New Orleans, Louisiana, January 20, 2005.
- Lane, R.L., and C.C. Kohler. 2006. Comparative fatty acid composition of eggs from white bass fed live food or commercial feed. North American Journal of Aquaculture 69:11-15.
- Morris, J. 1995. Pond preparation for larval fish. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Myers, J.J., C.C. Kohler, R.J. Sheehan, M.L. Allyn, J.B. Rudacille, and A.V. Suresh. 1998. Geographic strain comparison of hybrid striped bass (*Morone chrysops* H *M. saxatilis*) to a market size in earthen ponds. Illinois Renewable Natural Resources Conference, Springfield, Illinois, March 4-6, 1998.
- Poynter, E.C., R.L. Lane, A.M. Kelly, and C.C. Kohler. 2005. Triglyceride and their constituent fatty acid metabolism of sunshine bass *Morone chrysops* H *M. saxatilis* fed graded levels of long-chain polyunsaturated fatty acids during swimming activity. Aquaculture America 2005, New Orleans, Louisiana, January 18, 2005.
- Rudacille, J.B., and C.C. Kohler. 1996. Relative performance of white bass, sunshine bass, and palmetto bass fed a commercial diet. U.S. Chapter of the World Aquaculture Society, Arlington, Texas, February 14-17, 1996. (Awarded Best Student Presentation)

APPENDIX

-
- Rudacille, J.B., and C.C. Kohler. 1997. Performance of Phase III palmetto bass, sunshine bass and white in a recirculating water system. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Rudacille, J.B., and C.C. Kohler. 1997. Relative performance of Phase III sunshine bass, palmetto bass, and white bass in an indoor recirculating system. 35th Annual Meeting of the Illinois Chapter of the American Fisheries Society, Collinsville, Illinois, March 4-6, 1997. (Awarded Lewis L. Osborne Best Student Paper)
- Sheehan, R.J. 1995. Use of sperm extenders. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Swann, L. 1995. Cage culture. North Central Regional Aquaculture Center Hybrid Striped Bass Workshop, Champaign, Illinois, November 2-4, 1995.
- Trushenski, J.T., and C.C. Kohler. 2005. Vitamin E requirement of sunshine bass *Morone chrysops* H *M. saxatilis* as met by natural source vitamin E. Aquaculture America 2005, New Orleans, Louisiana, January 20, 2005.
- Volkman, E.C., C.C. Kohler, and S.T. Kohler. Floating vertical raceways for the culture of phase-II hybrid striped bass. Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003.
- Wetzel, J.E., and C.C. Kohler. Nutrient density effects on phase-III sunshine bass production. Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003.

LARGEMOUTH BASS

Publication in Print

- Bean, A. A Statistical, Genetic, and Molecular Approach for Establishing Largemouth Bass (*Micropterus salmoides*) strains for Rapid Growth to 1.5 Pounds in the North Central Region, Southern Illinois University, Carbondale, Illinois. Anticipated December 2016.
- Hart, S.D., P.B. Brown, and C.C. Kohler. 2008. Feeds utilized by commercial largemouth bass *Micropterus salmoides* producers in the United States. World Aquaculture 39:10-12; 72.

NATIONAL COORDINATOR FOR AQUACULTURE INADs/NADAs

Publications in Print

- Griffin, B.R., R.A. Schnick, and W.H. Gingerich. 2000. Update on the Federal-State Aquaculture Drug Approval Project. Aquaculture Magazine 26(3):56-58.
- MacMillan, J.R., R.A. Schnick, and G. Fornshell. 2006. Stakeholder position paper: aquaculture producer. Preventive Veterinary Medicine 73(2- 3):197-202.
- Schnick, R.A. 1996. Chemicals and drugs. Pages 347-354 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, North Central Regional Aquaculture Center Publications Office, Iowa State University, Ames.
- Schnick, R.A. 1996. Cooperative fish therapeutic funding initiative: States in partnership with federal agencies to ensure the future of public fish culture. Transactions of the 61st North American Wildlife and Natural Resources Conference 61:6-10.

APPENDIX

-
- Schnick, R.A. 1997. International regulatory aspects of chemical and drug residues. Pages 186-194 in R.E. Martin, R.L. Collette, and J.W. Slavin, editors. Fish inspection, quality control, and HACCP: a global focus. Technomic Publishing Company, Inc., Lancaster, Pennsylvania.
- Schnick, R.A. 1998. Approval of drugs and chemicals for use by the aquaculture industry. *Veterinary and Human Toxicology* 40(Supplement):9-17.
- Schnick, R.A. 1999. Use of chemicals in fish management and fish culture: past and future. Chapter 1, pages 1-14 in D.J. Smith, W.H. Gingerich and M. Beconi-Barker, editors. *Xenobiotics in fish*. Kluwer Academic/Plenum Publishers, New York.
- Schnick, R.A. 2000. Efficacy data needed for high priority aquaculture drugs. *American Fisheries Society Fish Health Newsletter* 28(2):3.
- Schnick, R.A., and R.D. Armstrong. 1997. Aquaculture drug approval progress in the United States. *Northern Aquaculture Supplement (Salmon Health Report)*:22-28.
- Schnick, R.A., and P. Smith. 1999. International harmonisation of antibacterial agent approvals and susceptibility testing. *EAFP Bulletin* 19(6):293-294.
- Schnick, R.A., W.H. Gingerich, and K.H. Koltcs. 1996. Federal-state aquaculture drug registration partnership: A success in the making. *Fisheries* 21(5):4.
- Schnick, R.A., D.J. Alderman, R. Armstrong, R. Le Gouvello, S. Ishihara, E.D. Lacierda, S. Percival, and M. Roth. 1997. Worldwide aquaculture drugs and vaccine registration progress. *Bulletin of the European Association of Fish Pathologists* 17(6):251-260.
- Schnick, R.A. 2005. The need for a zero withdrawal fish anesthetic. North Central Regional Aquaculture Center Web site (<http://ag.ansc.purdue.edu/aquanic/ncrac/pubs/A QUI-S.pdf>).
- Schnick, R.A. 2006. Zero withdrawal anesthetic for all fish and shellfish: need and candidates. *Fisheries* 31(3):122-126.
- Schnick, R.A. 2007. News: Fisheries: major aquaculture drug approval for 35% PEROX- AID®. *Fisheries* 32(2):58.
- Schnick, R.A. 2007. News: Fisheries: major aquaculture drug approval (Aquaflor®). *Fisheries* 32(4):162, 190.
- Schnick, R.A. 2007. News: Fisheries: Aquaflor® approved for furunculosis in salmonids. *Fisheries* 32(12):578.
- Schnick, R.A. 2008. News: Fisheries: Aquaculture drug approval for Terramycin® for Fish. *Fisheries* 33(7):317.

Papers Presented

- Gingerich, W.H. and R.A. Schnick. 1997. Federal- state aquaculture drug approval partnership program. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Gingerich, W.H. and R.A. Schnick. 1997. Aquaculture drug registration study progress report. Meeting of the International Association of Fish and Wildlife Agencies, Inland Fisheries Committee, Washington, D.C. March 16, 1997.
- Laurenson, J.P., B.L. Baxter, R.M. Kauffman, J.C. Cleland, and R.A. Schnick. 2005. Development and use of the Aquaculture Risk Information System (AQRIS) and Risk Ranking Tool (AQRRT) for prioritizing import sampling and other activities (poster). 2005 FDA Science Forum, Washington, D.C., April 27-29, 2005.

APPENDIX

- MacMillan, R., and R.A. Schnick. 2005. MUMS update: Positive impact of MUMS legislation. 11th Annual Drug Approval Coordination Workshop, Bozeman, Montana, August 2-3, 2005.
- Ringer, R.K. 1993. Workshop on INADs, NADAs, and the IR-4 Project. California Aquaculture Association, Oakland, October 11, 1993.
- Ringer, R.K. 1993. INAD workshop: proper drug and chemical use in aquaculture. 9th Annual Florida Aquaculture Association Conference, Fort Pierce, November 6, 1993.
- Ringer, R.K. 1994. National INAD Coordinator's role in aquaculture. 25th Annual Meeting of the World Aquaculture Society, New Orleans, January 12-18, 1994.
- Ringer, R.K. 1994. State of current USDA regulations on drug, therapeutic, and chemical use. North Carolina Aquaculture Development Conference, New Bern, February 5, 1994.
- Ringer, R.K. 1994. Investigational New Animal Drugs Workshop. Tropical and Subtropical Regional Aquaculture Center Industry Advisory Council Meeting, Honolulu, Hawaii, March 14, 1994.
- Schnick, R.A. 1995. Idaho Aquaculture Association Annual Meeting, Twin Falls, Idaho, May 19-22, 1995.
- Schnick, R.A. 1995. Chemistry in Aquaculture Symposium. Convener and presenter, Cullowhee, North Carolina, May 31-June 2, 1995.
- Schnick, R.A. 1995. FWS/INAD Coordination Workshop. Presenter and coordinator, Bozeman, Montana, August 1-4, 1995.
- Schnick, R.A. 1995. Funding crisis for drugs/therapeutants and coordination of aquaculture INADs/NADAs. Annual meeting of the U.S. Trout Farmers Association, Twin Falls, Idaho, September 27-30, 1995.
- Schnick, R.A. 1995. Activities of the National Coordinator for Aquaculture New Animal Drug Applications. Annual meeting of the National Research Support Program Number 7 (NRSP-7), Rockville, Maryland, October 2, 1995.
- Schnick, R.A. 1995. INAD/NADA Coordinators workshop under the sponsorship of CVM. Organizer and presenter, Rockville, Maryland, November 1-2, 1995.
- Schnick, R.A. 1996. Status of aquaculture INADs and NADAs. Presenter and coordinator, Midcontinent Warmwater Fish Culture Workshop and INAD/NADA Coordination Meetings, Council Bluffs, Iowa, February 6-8, 1996.
- Schnick, R.A. 1996. INAD/NADA update. Western Regional Aquaculture Expo >96, Sacramento, California, February 7-9, 1996.
- Schnick, R.A. 1996. National Aquaculture NADA Coordinator update. Working Group on Quality Assurance in Aquaculture Production, Arlington, Texas, February 14, 1996.
- Schnick, R.A. 1996. Proper use of fish therapeutants based on legal requirements-gill lice, bacterial gill disease, furunculosis, etc. Annual Meeting of the Michigan Aquaculture Association, East Lansing, Michigan, February 23, 1996.
- Schnick, R.A. 1996. Status of aquaculture drug development. Great Lakes Fish Disease Workshop, La Crosse, Wisconsin, February 28, 1996.
- Schnick, R.A. 1996. Advances in therapeutants. Southeastern Fish Diagnosticians' Workshop, Mississippi State,

APPENDIX

- Mississippi, March 13-14, 1996.
- Schnick, R.A. 1996. Report on progress and research study objectives of the Federal-State Drug Registration Partnership. Meeting of the International Association of Fish and Wildlife Agencies, *ad hoc* Committee on Aquaculture, Tulsa, Oklahoma, March 24, 1996.
- Schnick, R.A. 1996. Cooperative fish therapeutic funding initiative. States in partnership with Federal agencies to ensure the future of public fish culture. 61st North American Conference on Wildlife and Natural Resources, Tulsa, Oklahoma, March 24-28, 1996.
- Schnick, R.A. 1996. International regulatory aspects of chemical and drug residues. International Conference on Fish Inspection and Quality, Arlington, Virginia, May 19-24, 1996.
- Schnick, R.A. 1996. Aquaculture drug approval progress in the United States. Aquaculture Canada '96, 13th Annual Meeting of the Aquaculture Association of Canada, Ottawa, Ontario, June 2-5, 1996.
- Schnick, R.A. 1996. Summary of activities of the National Coordinator for Aquaculture New Animal Drug Applications (NADAs): (May 15, 1995 to May 14, 1996). Meeting of the Aquatic Remedies Steering Committee, American Pet Products Manufacturers Association, Minneapolis, Minnesota, June 18-19, 1996.
- Schnick, R.A. 1996. Overview of NADA Coordinator activities, International Project update, short-term INAD/NADA needs. FWS INAD Coordination Workshop, Bozeman, Montana, August 14-15, 1996.
- Schnick, R.A. 1996. The procedures and responsibilities related to the amoxicillin INAD. Meeting of the Fish Growers of America, Memphis, Tennessee, October 2, 1996.
- Schnick, R.A. 1996. Overview of pivotal study protocol requirements. Chloramine-T Pivotal Efficacy Protocol Development Workshop, Kansas City, Missouri, November 7-8, 1996.
- Schnick, R.A. 1997. INAD and drug clearance update. Midcontinent Warmwater Fish Culture Workshop, Springfield, Missouri, February 3-5, 1997.
- Schnick, R.A. 1997. Overview of partnerships for aquaculture drug approvals. Partnerships for Aquaculture Drug Approvals: Models for Success. Chair of Special Session at 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Schnick, R.A. 1997. Current status and future needs for drugs in aquaculture: regional needs. Workshop on International Harmonization for Drugs and Biologics, Seattle, Washington, February 24, 1997.
- Schnick, R.A. 1997. Aquaculture drug approval progress for the catfish industry. Catfish Farmers of America 1997 National Convention, Nashville, Tennessee, February 27-March 1, 1997.
- Schnick, R.A. 1997. Aquaculture drugs and chemicals approvals. Wisconsin Aquaculture Conference >97, Stevens Point, Wisconsin, March 14-15, 1997.
- Schnick, R.A. 1997. History of the IAFWA drug approval project; review of FDA's decisions on drug use in aquaculture; and negotiations by NADA coordinator. First Meeting of the IAFWA Drug Approval Oversight Subcommittee, Hot Springs, Arkansas, May 5, 1997.
- Schnick, R.A. 1997. Review of the November 1996 chloramine-T data requirements; Data call-in. Chloramine-T INAD Coordination Workshop, Bozeman, Montana, August 5, 1997.
- Schnick, R.A. 1997. Overview of NADA Coordinator activities. FWS-INAD Coordination Workshop, Bozeman, Montana, August 7, 1997.

APPENDIX

- Schnick, R.A. 1997. NADA Coordinator update. JSA Working Group on Quality Assurance in Aquaculture Production, Washington, D.C., August 21-22, 1997.
- Schnick, R.A. 1997. Worldwide aquaculture drug approvals through partnerships in the United States. Seminar to Schering-Plough Animal Health, Union, New Jersey, August 26, 1997.
- Schnick, R.A. 1997. Progress with registration of drugs and vaccines for aquaculture: introduction and the United States. Chair and presenter at Workshop on Models of Partnership for Registration of Drugs and Vaccines and a Round Table on Progress with Registration of Drugs and Vaccines for Aquaculture, EAFP Eighth International Conference on Diseases of Fish and Shellfish, Edinburgh, Scotland, September 14-19, 1997.
- Schnick, R.A. 1997. Role of the national NADA office in aquaculture drug approval activities. Aquaculture Drugs and Chemicals Approval Update, Arlington, Virginia, September 30, 1997.
- Schnick, R.A. 1997. Partial support for National Coordinator for Aquaculture New Animal Drug Applications. WRAC IAC/TC Meeting, Reno, Nevada, October 20-21, 1997.
- Schnick, R.A. 1998. Priorities subcommittee report. Workshop on International Harmonization of Aquaculture Drugs and Biologics, Las Vegas, Nevada, February 15, 1998.
- Schnick, R.A. 1998. Upcoming successes for aquaculture drug approvals in the United States through unique partnerships. Special Session, Aquaculture drug approvals a success story about to happen, 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Schnick, R.A. 1998. Progress on 5-year plan items (Plan items 1, 2, 12, and 13). Working Group on Quality Assurance in Aquaculture Production, 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Schnick, R.A. 1998. Introduction and discussion of INADs and extra-label use. Special Session, Aquaculture drug approvals through producer INADs, 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Schnick, R.A. 1998. INADs and other drug business. PNFHPC meeting, 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Schnick, R.A. 1998. Aquaculture drug approval update. Meeting of the Aquaculture & Seafood Advisory Committee, American Veterinary Medical Association, 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Schnick, R.A. 1998. Progress on aquaculture drug approvals. Fisheries Management and Habitat Protection Statewide Training Conference, Green Bay, Wisconsin, March 10-12, 1998.
- Schnick, R.A. 1998. IAFWA Project status and progress. Meeting of the Inland Fisheries Committee, North American Natural Resources Conference, Orlando, Florida, March 20-24, 1998.
- Schnick, R.A. 1998. Use of chemicals in fish management and fish culture: past and future. Symposium, Xenobiotic metabolism in fish, American Chemical Society, Dallas, Texas, March 29-April 2, 1998.
- Schnick, R.A. 1998. Drug approval partnership. American Fisheries Society, Fisheries Administrator's Section, Phoenix, Arizona, April 17-19, 1998.
- Schnick, R.A. 1998. Overview of NADA Coordinator activities. FWS-INAD Coordination Workshop, Bozeman, Montana, August 4-5, 1998.

APPENDIX

-
- Schnick, R.A. 1998. NADA Coordinator update. Meeting of the JSA Working Group on Quality Assurance in Aquaculture Production, Washington, D.C., September 4, 1998.
- Schnick, R.A. 1998. Overview of the activities of the National Coordinator for Aquaculture New Animal Drug Applications and suggestions for enhancing dialogue with the Minor Use Animal Drug Program. Meeting of the Minor Use Animal Drug Program Technical Committee for NRSP-7, Rockville, Maryland, September 22, 1998.
- Schnick, R.A. 1998. The effect of the Animal Drug Availability Act of 1996 and the FDA Modernization Act of 1997 on approvals of animal health products for minor species/minor uses. 1998 Animal Health Institute Joint Meeting, San Diego, California, November 9, 1998.
- Schnick, R.A. 1998. Overview of IAFWA Project Status. Coordination meeting for IAFWA Aquaculture Drug Approval Project, La Crosse, Wisconsin, November 19-20, 1998.
- Schnick, R.A. 1998. Overview of the international aspects of antimicrobial sensitivity determination and the need for harmonization in aquaculture drugs. Workshop on MIC Methodology (EU Concerted Action - Fair-CT97-3760), Weymouth, England, November 24-27, 1998.
- Schnick, R.A. 1999. National NADA Office aquaculture drug approval activities. Aquaculture Drugs and Chemicals Approval Update 1999, Arlington, Virginia, January 11, 1999.
- Schnick, R.A. 1999. Introduction and discussion of INADs and new NADAs. Aquaculture drug approvals through producer INADs, Aquaculture America 1999, Tampa, Florida, January 27-30, 1999.
- Schnick, R.A. 1999. Update on activities of the National Coordinator for Aquaculture New Animal Drug Applications. Meeting of the Joint Subcommittee on Aquaculture, Working Group on Quality Assurance in Aquaculture Production, Aquaculture America 1999, Tampa, Florida, January 27-30, 1999.
- Schnick, R.A. 1999. Update on the IAFWA drug approval process. 1999 Mid-Continent Fish Culture Workshop, North Kansas City, Missouri, February 2-3, 1999.
- Schnick, R.A. 1999. Aquaculture drug approval progress for the catfish industry. Annual Meeting of the Catfish Farmers of America, New Orleans, Louisiana, February 18-20, 1999.
- Schnick, R.A. 1999. Advances in fishery chemicals. 1999 Colorado/Wyoming AFS Meeting, Reeling in the next millennium, Cheyenne, Wyoming, March 1-3, 1999.
- Schnick, R.A. 1999. Overview of florfenicol approval process. Coordination meeting for florfenicol efficacy studies, La Crosse, Wisconsin, March 17-18, 1999.
- Schnick, R.A. 1999. Progress and issues related to the federal-state aquaculture drug approval partnership. Meeting of the IAFWA Drug Approval Oversight Subcommittee, San Francisco, California, March 25-28, 1999.
- Schnick, R.A. 1999. International cooperation toward aquaculture drug approvals. 30th Annual Meeting of the World Aquaculture Society, Sydney, Australia, April 26-May 2, 1999. (Keynote address)
- Schnick, R.A. 1999. USA programs related to aquaculture drug approval development and issues. Australian Department of Agriculture, Fisheries and Forestry, Canberra, Australia, May 3, 1999.
- Schnick, R.A. 1999. Overview of NADA Coordinator activities. USFWS - INAD Coordination Workshop, Bozeman, Montana, August 4-5, 1999.
- Schnick, R.A. 1999. Aquaculture NADA Coordinator update. Meeting of the JSA Working Group on Quality

APPENDIX

Assurance in Aquaculture Production, Washington, D.C., September 9, 1999.

Schnick, R.A. 1999. International harmonisation of antibacterial agent approvals and susceptibility testing. Chaired Workshop at European Association of Fish Pathologists 9th International Conference, Diseases of Fish and Shellfish, Rhodes, Greece, September 19-24, 1999.

Schnick, R.A. 2000. National Coordinator for Aquaculture New Animal Drug Applications update. Working Group on Quality Assurance in Aquaculture Production at Aquaculture America 2000, New Orleans, Louisiana, February 2, 2000.

Schnick, R.A. 2000. Introduction and background to the MUMS legislation. Special Session Future drug approval process: MUMS opportunities, Aquaculture America 2000, New Orleans, Louisiana, February 2-5, 2000.

Schnick, R.A. 2000. You can make a difference.
Special Session Future drug approval process: MUMS opportunities. @ Aquaculture America 2000, New Orleans, Louisiana, February 2-5, 2000.

Schnick, R.A. 2000. Drug approvals. Mid-Continent Warmwater Fish Culture Workshop, Council Bluffs, Iowa, February 7-8, 2000.

Schnick, R.A. 2000. New drug approval progress.
Missouri Aquaculture Association Annual Meeting, Cape Girardeau, Missouri, February 22-23, 2000.

Schnick, R.A. 2000. Update on the Federal-State Aquaculture Drug Approval Project.
International Association for Fish and Wildlife Agencies, Drug Approval Working Group Meeting, Chicago, Illinois, March 26, 2000.

Schnick, R.A. 2004. Brief overview: Recent developments and highlights on drug approval progress. Drug Approval Working Group Meeting, Atlantic City, New Jersey, September 27, 2004.

Schnick, R.A. 2004. Review and Policy Guidance #5 Strategic plan for end point to IAFWA Project. Drug Approval Working Group Meeting, Atlantic City, New Jersey, September 27, 2004.

Schnick, R.A. 2004. IAFWA Project Work Plan National Coordinator for Aquaculture New Animal Drug Applications. Post-Drug Approval Working Group Meeting, Atlantic City, New Jersey, September 27, 2004.

Schnick, R.A. 2004. Aquaculture outside of NRSP-7.
NRSP-7 Fall 2004 Meeting, Rockville, Maryland, October 6, 2004.

Schnick, R.A. 2004. Drug issue and needs for Southern U.S. Marine Aquaculture. Workshop on Marine Aquaculture Drug and Chemotherapeutant Issues and Needs on Southern United States, Sarasota, Florida, November 16, 2004. PowerPoint presentation distributed to interested entities and placed the National Aquaculture NADA Coordinator Web site.

Schnick, R.A. 2005. An update on the approval of therapeutants for use in aquaculture. Coolwater Fish Culture Workshop, Cherry Valley Lodge, Ohio, January 9-11, 2005.

Schnick, R.A. 2005. Need for a zero withdrawal anesthetic for coolwater fish culture. Coolwater Fish Culture Workshop, Cherry Valley Lodge, Ohio, January 9-11, 2005.

Schnick, R.A. 2005. Drug Matrix Database. JSA Working Group on Quality Assurance in Aquaculture Production, Aquaculture America 2005, New Orleans, Louisiana, January 17, 2005.

APPENDIX

- Schnick, R.A. 2005. INAD/NADA OverviewC17 α - methyltestosterone. 17-MT Mini-Session, Aquaculture America 2005, New Orleans, Louisiana, January 18, 2005.
- Schnick, R.A. 2005. Responsible use of therapeutants drugs in aquaculture. Environmental and Ethical Issues in Aquaculture, Aquaculture America 2005, New Orleans, Louisiana, January 19, 2005.
- Schnick, R.A. 2005. Update on product approvals for fish health. Striped Bass Industry Forum, Aquaculture America 2005, New Orleans, Louisiana, January 19, 2005.
- Schnick, R.A. 2005. Highlights and progress toward aquaculture drug approvals. Producer Session ASuccesses in Drug Approvals,@ Aquaculture America 2005, New Orleans, Louisiana, January 20, 2005.
- Schnick, R.A. 2005. Highlights on IAFWA Project drug approval progress. Drug Approval Working Group Meeting, Arlington, Virginia, March 16, 2005.
- Schnick, R.A. 2005. Questions in Strategic Plan for End Point to the IAFWA Project. Drug Approval Working Group Meeting, Arlington, Virginia, March 16, 2005.
- Schnick, R.A. 2005. IAFWA Project Work PlanCNational Coordinator for Aquaculture New Animal Drug Applications. Drug Approval Working Group Meeting, Arlington, Virginia, March 16, 2005.
- Schnick, R.A. 2005. Aquaculture drug approval progress. NRSP-7 Meeting, Rockville, Maryland, May 19, 2005.
- Schnick, R.A. 2005. Upcoming aquaculture drug approvals. American Fisheries Society Fish Health Section Meeting, Bloomington, Minnesota, July 27-29, 2005.
- Schnick, R.A. 2005. Matrices for tracking major aquaculture drug approval development. 11th Annual Drug Approval Coordination Workshop, Bozeman, Montana, August 2-3, 2005.
- Schnick, R.A. 2005. Brief overview—recent developments and highlights on drug approval progress. Drug Approval Working Group Meeting, Nashville, Tennessee, September 15, 2005.
- Schnick, R.A. 2005. Overview of the status of (1) Expansion and extension of the oxytetracycline (OTC) label claims, (2) Initial label claims for chloramine-T, (3) Microbial Food Safety submissions on these and other aquaculture drugs, and (4) Information on public and private aquaculture production statistics. Meeting on Microbial Food Safety Data Requirements for Oral Oxytetracycline and Chloramine-T for Approval in U.S. Commercial and Public Freshwater Aquaculture, Rockville, Maryland, October 5, 2005.
- Schnick, R.A. 2006. Internet-based drug matrix database and application. Working Group on Quality Assurance in Aquaculture Production meeting at Aquaculture America 2006, Las Vegas, Nevada, February 13, 2006.
- Schnick, R.A. 2006. 2005 Survey to determine unmet label claims for the IAFWA Project drugs. Working Group on Quality Assurance in Aquaculture Production meeting at Aquaculture America 2006, Las Vegas, Nevada, February 13, 2006.
- Schnick, R.A. 2006. Drug approvals for salmonids: success soon. US Trout Farmers Association Industry Update at Aquaculture America 2006, Las Vegas, Nevada, February 14, 2006.
- Schnick, R.A. 2006. 17 α -methyltestosterone activities timeline. 17 α -methyltestosterone: Approval status

APPENDIX

and activities overview at Aquaculture America 2006, Las Vegas, Nevada, February 14, 2006.

Schnick, R.A. 2006. Update on product approvals for fish health. Striped Bass Growers Association Industry Update at Aquaculture America 2006, Las Vegas, Nevada, February 15, 2006.

Schnick, R.A. 2006. Partnerships toward the approval of 17-MT. American Tilapia Association Industry Update at Aquaculture America 2006, Las Vegas, Nevada, February 15, 2006.

Schnick, R.A. 2006. Recent aquaculture drug approval successes. Producer Session "Aquaculture Drug Approval Successes" at Aquaculture America 2006, Las Vegas, Nevada, February 16, 2006.

Schnick, R.A. 2006. Special funding for aquaculture drug approvals. Producer Session "Aquaculture Drug Approval Successes" at Aquaculture America 2006, Las Vegas, Nevada, February 16, 2006.

Schnick, R.A. 2006. Update and status of IAFWA Project drugs. Drug Approval Working Group, Columbus, Ohio, March 21, 2006.

Schnick, R.A. 2006. Brief highlights of the last six months for IAFWA Project drugs. Drug Approval Working Group, Columbus, Ohio, March 21, 2006.

Schnick, R.A. 2006. Drug approval status: Then and now. 31st Eastern Fish Health Workshop, Charleston, South Carolina, March 27-31, 2006.

Schnick, R.A. 2006. Drug approval status: Why we are where we are and not where you thought we should be. 31st Eastern Fish Health Workshop, Charleston, South Carolina, March 27-31, 2006.

Schnick, R.A. 2006. Presentation to NRSP-7. NRSP- 7 Spring Meeting 2006, Rockville, Maryland, May 11, 2006.

Schnick, R.A. 2006. Private aquaculture sector survey needed to complete the exciting progress toward drug approvals. National Association of State Aquaculture Coordinators, Little Rock, Arkansas, May 23-26, 2006.

Schnick, R.A. 2006. History of efforts toward aquaculture drug approvals. Center for Veterinary Medicine, Rockville, Maryland, June 5, 2006,

Schnick, R.A. 2006. Overview of Public Aquaculture Sector Survey to determine unmet label claims for IAWFA Project drugs. 12th Annual Aquaculture Drug Approval Coordination Workshop, La Crosse, Wisconsin, August 1-2, 2006.

Schnick, R.A. 2006. Introduction to non-IAFWA projects for aquaculture drug approvals. 12th Annual Aquaculture Drug Approval Coordination Workshop, La Crosse, Wisconsin, August 1-2, 2006.

Schnick, R.A. 2006. Aquaculture NADA Coordinator's perspective on non-IAFWA Project drugs. 12th Annual Aquaculture Drug Approval Coordination Workshop, La Crosse, Wisconsin, August 1-2, 2006.

Schnick, R.A. 2006. Update on AFWA Project Drugs. AFWA Drug Approval Working Group, Aspen, Colorado, September 18, 2006.

Schnick, R.A. 2006. Advances toward drug approvals for farmed fish. Penn Aqua 2006, Harrisburg, Pennsylvania, September 20-23, 2006.

Schnick, R.A. 2006. Advances in aquaculture drug approvals. NRSP-7, La Crosse, Wisconsin, October 10, 2006.

APPENDIX

- Schnick, R.A. 2006. Actual and anticipated NADA approvals for 2006-2009. JSA Working Group on Aquaculture Drugs, Biologics, and Pesticides Meeting, Washington, D.C., October 25, 2006.
- Schnick, R.A. 2006. Microbial Food Safety submissions & acceptances. JSA Working Group on Aquaculture Drugs, Biologics, and Pesticides Meeting, Washington, D.C., October 25, 2006.
- Schnick, R.A. 2006. Effect of MUMS designations on sponsor participation. JSA Working Group on Aquaculture Drugs, Biologics, and Pesticides Meeting, Washington, D.C., October 25, 2006.
- Schnick, R.A. 2006. Proposed actions to meet unmet label claims from the Public Aquaculture Sector Survey. JSA Working Group on Aquaculture Drugs, Biologics, and Pesticides Meeting, Washington, D.C., October 25, 2006.
- Schnick, R.A. 2007. Update on aquaculture drug approvals. North Central Regional Aquaculture Center Annual Meeting, Columbus, Ohio, February 9-11, 2007.
- Schnick, R.A. 2007. Update on new drug approvals for catfish. Catfish Farmers of America Annual Meeting, Orange Beach, Alabama, February 15- 18, 2007.
- Schnick, R.A. 2007. Recent aquaculture drug approval successes. Aquaculture 2007, Producer Session "Aquaculture drug approval successes," San Antonio, Texas, February 28, 2007.
- Schnick, R.A. 2007. Progress on drug approvals. Aquaculture 2007, Striped Bass Growers Association Annual Meeting, San Antonio, Texas, February 28, 2007.
- Schnick, R.A. 2007. Progress on drug approvals for salmonids. Aquaculture 2007, US Trout Farmers Association Forum, San Antonio, Texas, February 27, 2007.
- Schnick, R.A. 2007. Progress on drug approvals for tilapia. Aquaculture 2007, American Tilapia Association Session, San Antonio, Texas, March 1, 2007.
- Schnick, R.A. 2007. Status of aquaculture drug approvals. NRSP-7 Spring Meeting, Rockville, Maryland, March 5-7, 2007.
- Schnick, R.A. 2007. AFWA Project Drugs: Remaining requirements and progress September 2006 to March 2007, Drug Approval Working Group Meeting, Portland, Oregon, March 22, 2007.
- Schnick, R.A. 2007. Thoughts on administrative NADA process, Drug Approval Working Group Meeting, Portland, Oregon, March 22, 2007.
- Schnick, R.A. 2007. How Extension Specialists can help in the aquaculture drug approval process. 4th National Aquaculture Extension Conference, Cincinnati, Ohio, April 30 to May 4, 2007.
- Schnick, R.A. 2007. Dialog with Upper Midwest Environmental Sciences Center on Fisheries Management Chemicals and Drugs Program. Upper Midwest Environmental Sciences Center Partner Meetings, La Crosse, Wisconsin, May 10-11, 2007.
- Schnick, R.A. 2007. Progress towards aquaculture drug approvals. 144th AVMA Annual Convention, Washington, D.C., July 14-18, 2007.
- Schnick, R.A. 2007. Possibilities for expediting Canadian aquaculture drug approval processes. Veterinary Drugs Directorate, Ottawa, Ontario, Canada, July 18, 2007.

APPENDIX

-
- Schnick, R.A. 2007. Historical background to this fabulous partnership. 13th Annual Drug Approval Coordination Workshop, Bozeman, Montana, July 31-August 1, 2007.
- Schnick, R.A. 2007. The future of this fabulous partnership. 13th Annual Drug Approval Coordination Workshop, Bozeman, Montana, July 31-August 1, 2007.
- Schnick, R.A. 2007. The AFWA Project: NADA approvals, label claims under development for initial and/or expanded NADA approvals, and status of technical section completions. 13th Annual Drug Approval Coordination Workshop, Bozeman, Montana, July 31-August 1, 2007.
- Schnick, R.A. 2007. Progress on new aquaculture drug approvals for disease management. Disease Management Strategies for the Aquatic Environment: Alternatives & Innovations. AFS Annual Meeting, San Francisco, California, September 5, 2007.
- Schnick, R.A. 2007. Strategic review of UMESC's Fish Management and Drug Research Program. La Crosse, Wisconsin, September 13, 2007.
- Schnick, R.A. 2007. Update discussion of AFWA Project Drugs. Drug Approval Working Group. AFWA Annual Meeting, Louisville, Kentucky, September 17-18, 2007.
- Schnick, R.A. 2007. Major efforts and accomplishments: National Coordinator for Aquaculture New Animal Drug Applications.
Center for Veterinary Medicine, Rockville, Maryland, December 5, 2007.
- Schnick, R.A. 2007. Efforts to gain aquaculture drug approvals. Center for Veterinary Medicine, Rockville, Maryland, December 5, 2007.
- Schnick, R.A. 2008. Update on product approvals for fish health. Striped Bass Growers Association Industry Forum, Aquaculture America 2008, Orlando, Florida, February 10, 2008.
- Schnick, R.A. 2008. Overall progress toward aquaculture drug approvals. Aquaculture Drug Approval Successes, Aquaculture America 2008, Orlando, Florida, February 12, 2008.
- Schnick, R.A. 2008. Status report on aquaculture drug approvals. North Central Regional Aquaculture Center Annual Program Planning Meeting, Indianapolis, Indiana, February 22-24, 2008.
- Schnick, R.A. 2008. Isoeugenol (AQUI-S®) and sedative issue. Drug Approval Working Group, 73rd North American Wildlife and Natural Resources Conference, Phoenix, Arizona, March 26-28, 2008.
- Schnick, R.A. 2008. Update discussion on AFWA Project drugs. Drug Approval Working Group, 73rd North American Wildlife and Natural Resources Conference, Phoenix, Arizona, March 26-28, 2008.
- Schnick, R.A. 2008. Partnerships: The key to AFWA Project successes. 14th Annual Drug Approval Coordination Workshop, Bozeman, Montana, July 29-31, 2008.
- Schnick, R.A. 2008. Zero withdrawal sedative dilemma and solutions. 14th Annual Drug Approval Coordination Workshop, Bozeman, Montana, July 29-31, 2008.
- Schnick, R.A. 2008. Aquaculture drug approvals: successes and challenges. U.S. Trout Farmers Association Annual Meeting, Milwaukee, Wisconsin, September 19, 2008.
- Schnick, R.A. 2008. It's been a wonderful life.
Onalaska Rotary Club, Onalaska, Wisconsin, December 10, 2008.

APPENDIX

-
- Schnick, R.A. 2009. Aquaculture drug approvals: successes and challenges. NRSP-7 Spring Meeting, Washington, D.C., January 26, 2009.
- Schnick, R.A. 2009. Introduction and brief overall progress toward aquaculture drug approvals, Part I. Aquaculture Drug Approval Successes, Aquaculture America 2009, Seattle, Washington, February 18, 2009.
- Schnick, R.A. 2009. Overall progress toward aquaculture drug approvals, Part II. Aquaculture Drug Approval Successes, Aquaculture America 2009, Seattle, Washington, February 18, 2009.
- Schnick, R.A. 2009. Update on product approvals for fish health. Striped Bass Growers Association, Aquaculture America 2009, Seattle, Washington, February 18, 2009.
- Schnick, R.A. 2009. Aquaculture drugs—Status report. North Central Regional Aquaculture Center Board of Directors and 2009 Program Planning Meeting, Kansas City, Missouri, February 28, 2009.
- Schnick, R.A. 2009. 45 years of efforts toward aquaculture drug approvals: a perspective. 15th Annual Drug Approval Coordination Workshop, Little Rock, Arkansas, June 9, 2009.
- Schnick, R.A. 2009. National Aquaculture NADA Coordinator perspective on all aquaculture drug approvals. 15th Annual Drug Approval Coordination Workshop, Little Rock, Arkansas, June 9, 2009.
- Schnick, R.A. 2009. Update on all sedative needs & what we need to do to meet those needs. 15th Annual Drug Approval Coordination Workshop, Little Rock, Arkansas, June 10, 2009.
- Schnick, R.A. 2009. Humble reflections on the aquaculture drug approval process and progress: a 40-year perspective. 14th European Association of Fish Pathologists Conference on Diseases of Fish and Shellfish, Prague, Czech Republic, September 14-19, 2009.
- Schnick, R.A. 2009. Transition October 2009–April 2010: The National Coordinator for Aquaculture New Animal Drug Applications, Center for Veterinary Medicine, Rockville, Maryland, October 15-16, 2009.
- Schwaab, E., and R.A. Schnick. 2005. Summary of IAFWA Project: History and partnerships. 11th Annual Drug Approval Coordination Workshop, Bozeman, Montana, August 2-3, 2005.
- Schwaab, E., and R.A. Schnick. 2006. Summary of IAFWA Project: History and partnerships. 12th Annual Aquaculture Drug Approval Coordination Workshop, La Crosse, Wisconsin, August 1-2, 2006.

NUTRITION/DIETS

Publications in Print

- Brown, P.B. 2006. Nutrition. Pages 45-50 in S.D. Hart, D.L. Garling, and J.A. Malison, editors. Yellow perch (*Perca flavescens*) culture guide. North Central Regional Aquaculture Center, NCRAC Culture Series #103. Iowa State University, Ames.
- Brown, P.B. 2008. Utilization of soy products originating from soybeans in diets fed to freshwater fishes. Pages 225-260 in C. Webster, C. Lim, and C.-S. Lee, editors. Alternative protein sources in aquaculture diets. Haworth Press, Taylor and Francis Group, New York.

APPENDIX

-
- Brown, P.B., S.J. Kaushik, and H. Peres. 2008. Protein feedstuffs originating from soybeans. Pages 205-223 in C. Webster, C. Lim, and C.-S. Lee, editors. *Alternative protein sources in aquaculture diets*. Haworth Press, Taylor and Francis Group, New York.
- Brown, P.B., B.J. Brown, S. Hart, J. Curry, and A. Hittle-Hutson. 2008. Comparison of soybean- based practical diets containing 32, 36, or 40% crude protein fed to hybrid striped bass in earthen culture ponds. *North American Journal of Aquaculture* 70:128-131.
- Gatlin, D.M., III, F.T. Barrows, P. Brown, K. Dabrowski, T.G. Gaylord, R.W. Hardy, E. Herman, G. Hu, A. Krogdahl, R. Nelson, K. Overturf, M. Rust, W. Sealey, D. Skonberg, E.J. Souza, D. Stone, R. Wilson, and E. Wurtele. 2007. Expanding the utilization of sustainable plant products in aquafeeds: a review. *Aquaculture Research* 38:551-579.
- Kasper, C.S., B.A. Watkins, and P.B. Brown. 2007. Evaluation of two soybean meals fed to yellow perch (*Perca flavescens*). *Aquaculture Nutrition* 13:431-438.
- Lewis, H.A. 2006. Minimum dietary fish oil requirement to maintain highly unsaturated fatty acid concentrations in the fillets of sunshine bass fed diets containing little or no fish meal. Master's thesis. Southern Illinois University- Carbondale.
- Lewis, H.A. and C.C. Kohler. 2008. Minimizing fish oil and fish meal in sunshine bass diets without negatively impacting growth and fillet fatty acid profile. *Journal of the World Aquaculture Society* 39:573-585.
- Lewis, H.A. and C.C. Kohler. 2008. Corn gluten meal partially replaces dietary fish meal without compromising growth or the fatty acid composition of sunshine bass. *North American Journal of Aquaculture* 70:50-60.
- Twibell, R.G., M.E. Griffin, B. Martin, J. Price, and P.B. Brown. 2003. Predicting dietary essential amino acid requirements for hybrid striped bass. *Aquaculture Nutrition* 9:373-382.
- Manuscript**
- Hart, S.D., B.J. Brown, N.L. Gould, M.L. Robar, E.M. Witt, and P.B. Brown. 2009. Predicting optimal dietary essential amino acid profile for growth of juvenile yellow perch with whole body amino acid concentrations. *Aquaculture Nutrition* 16 (3) 248-253. Available at DOI: 10.1111/j.1365-2095.2009.00659.x
- Papers Presented**
- Brown, P.B. 2007. Recent advances in yellow perch nutrition. *Aquaculture 2007*, San Antonio, Texas, February 26-March 2, 2007.
- Lewis, H.A. and C.C. Kohler. 2006. Plant-based protein sources partially replace menhaden fish meal in practical diets fed to juvenile sunshine bass. *Aquaculture America 2006*, Las Vegas Nevada, February 13-16, 2006.
- Lewis, H.A. and C.C. Kohler. 2006. Plant-based protein sources partially replace menhaden fish meal in practical diets fed to juvenile sunshine bass. Illinois Chapter of the American Fisheries Society, Rend Lake, Illinois, March 9, 2006.
- Lewis, H.A. and C.C. Kohler. 2006. Plant-based protein sources partially replace menhaden meal in practical diets for juvenile sunshine bass. American Fisheries Society Annual Meeting, Lake Placid, New York, September 10-14, 2006.
- Lewis, H.A. and C.C. Kohler. 2007. Minimizing fish oil and fish meal in sunshine bass diets without negatively impacting growth and fillet fatty acid profile. Annual Meeting of the American Fisheries Society, San Francisco, California, September 2-7, 2007.

APPENDIX

Lewis, H.A., and C.C. Kohler. 2007. Dietary menhaden oil requirement of sunshine bass *Morone chrysops* × *M. saxatilis* fed diets containing 20% menhaden meal to maintain aquaculture production and fillet quality. Aquaculture 2007, San Antonio, Texas, February 26-March 2, 2007.

SALMONIDS

Publications in Print

- Adelizi, P.D., R.R. Rosati, K. Warner, Y.V. Wu, T.R. Muench, M.R. White, and P.B. Brown. 1998. Evaluation of fish meal-free diets for rainbow trout, *Oncorhynchus mykiss*. Aquaculture Nutrition 4:255-262.
- Cain, K.D., and D.L. Garling. 1995. Pretreatment of soy bean meal for salmonid diets with phytase to reduce phosphorus concentration in hatchery effluents. Progressive Fish-Culturist 57:114-119.
- Finck, J.L. 1994. Activity of all-female and mixed- sex rainbow trout (*Oncorhynchus mykiss*) and their early growth and survival in comparison to all-female triploids. Master's thesis, Southern Illinois University-Carbondale.
- Lee, K.-J., K. Dabrowski, J.H. Blom, and S.C. Bai. Replacement of fish meal by a mixture of animal by-products in juvenile rainbow trout diets. North American Journal of Aquaculture 109- 117.
- Lee, K.-J., K. Dabrowski, J.H. Blom, S.C. Bai, and P.C. Stromberg. 2002. A mixture of cottonseed meal, soybean meal and animal byproduct mixture as a fish meal substitute: growth and tissue gossypol enantiomer in juvenile rainbow trout (*Oncorhynchus mykiss*). Journal of Animal Physiology and Animal Nutrition 86(7-8):201- 213.
- Lesiow, T., H.W. Ockerman, and K. Dabrowski. 2009. Composition, properties and sensory quality of rainbow trout affected by feed formulations. Journal of the World Aquaculture Society 40(5):678-686.
- Pan, J.Z., K. Dabrowski, L. Liu, and A. Ciereszko. 1995. Characteristics of semen and ovary in rainbow trout (*Oncorhynchus mykiss*) fed fish meal and/or animal by-product based diets. Proceedings of the 5th International Symposium on the Reproductive Physiology of Fish, Austin, Texas, July 2-8, 1995.
- Procarione, L.S., T.P. Barry, and J.A. Malison. 1999. Effects of high rearing densities and loading rates on the growth and stress responses of juvenile rainbow trout. North American Journal of Aquaculture 61:91-96.
- Ramseyer, L.J. 1995. Total length to fork length relationships of juvenile hatchery-reared coho and chinook salmon. Progressive Fish-Culturist 57:250-251.
- Ramseyer, L.J. 1997. Nutritional strategies for reducing pollutants in aquaculture effluents. Doctoral dissertation, Michigan State University, East Lansing.
- Ramseyer, L., D.L. Garling, Jr., G. Hill, and J. Link. 1999. Effect of dietary zinc supplementation and phytase pretreatment of soybean meal or corn gluten meal on growth, zinc status and zinc- related metabolism in rainbow trout, *Oncorhynchus mykiss*. Fish Physiology and Biochemistry 20:251-261.
- Riche, M. 1993. Phosphorus absorption coefficients for rainbow trout (*Oncorhynchus mykiss*) fed commercial sources of protein. Master's thesis. Purdue University, West Lafayette, Indiana.
- Riche, M., and P.B. Brown. 1996. Availability of phosphorus from feedstuffs fed to rainbow trout, *Oncorhynchus mykiss*. Aquaculture 142:269- 282.
- Riche, M. and P.B. Brown. 1999. Incorporation of plant protein feedstuffs into fish meal diets for rainbow trout

APPENDIX

increases phosphorus availability. *Aquaculture Nutrition* 5:101-105.

Riche, M., M.R. White, and P.B. Brown. 1995. Barium carbonate as an alternative indicator to chromic oxide for use in digestibility experiments with rainbow trout. *Nutrition Research* 15:1323-1331.

Shasteen, S.P. 1995. Benefits of artificial swimbladder deflation for depressurized largemouth bass, walleye, and rainbow trout in catch and release fisheries. Master's thesis. Southern Illinois University-Carbondale.

Sheehan, R.J., S.P. Shasteen, A.V. Suresh, A.R. Kapuscinski, and J.E. Seeb. 1999. All-female triploids and diploids outgrow mixed-sex diploid rainbow trout. *Transactions of the American Fisheries Society* 128:491-498.

Suresh, A.V. 1996. Fiber growth and DNA, RNA, and protein concentrations in white muscle tissue as indicators of growth in diploid and triploid rainbow trout, *Oncorhynchus mykiss*. Doctoral dissertation. Southern Illinois University- Carbondale.

Suresh, A.V., and R.J. Sheehan. 1998. Muscle fiber growth dynamics in diploid and triploid rainbow trout. *Journal of Fish Biology* 52:570-587.

Suresh, A.V., and R.J. Sheehan. 1998. Biochemical and morphological correlates of growth in diploid and triploid rainbow trout. *Journal of Fish Biology* 52:588-599.

Weil, L.S, T.P. Barry, and J.A. Malison. 2001. Fast growth in rainbow trout is correlated with a rapid decrease in post-stress cortisol stress concentrations. *Aquaculture* 193:373-380.

Papers Presented

Adelizi, P., P. Brown, V. Wu, and R. Rosati. 1995.

Fish meal-free diets for rainbow trout. 24th Annual Fish Feed and Nutrition Workshop, Columbus, Ohio, October 19-21, 1995.

Adelizi, P., P. Brown, V. Wu, K. Warner, and R. Rosati. 1996. Alternative feed ingredients in diets fed to rainbow trout. *Aquaculture America*, Dallas, Texas, February 14-17, 1996.

Barry, T.P., T.B. Kayes, T.E. Kuczynski, A.F. Lapp,

L.S. Procarione, and J.A. Malison. 1993. Effects of high rearing density and low-level gas supersaturation on the growth and stress responses of lake trout (*Salvelinus namaycush*). 123rd Annual Meeting of the American Fisheries Society, Portland, Oregon, August 28-September 3, 1993.

Bharadwaj, A., and P.B. Brown. 1999. Growth response of rainbow trout fed fish meal and plant based diets. *Aquaculture America '99*, Tampa, Florida, January 27-30, 1999.

Brown, P.B. 1993. Salmonid aquaculture in the North Central Region. Seventh Annual Minnesota Aquaculture Conference, Alexandria, Minnesota, March 5-6, 1993.

Brown, P.B., Y. Hodgins, K. Wilson, and J. Stanley.

1996. Review of lecithin in aquaculture and evaluation of three commercial lecithin products in diets fed to coho and Atlantic salmon. 87th Annual Meeting of the American Oil Chemists' Society, Indianapolis, Indiana, June 22-24, 1996.

Dabrowski, K. 2002. Utilization of cottonseed meal as fishmeal replacement in rainbow trout diets. Michigan Aquaculture Association Annual Conference, Cadillac, Michigan, February 7-8, 2002.

Dabrowski, K., A. Ciereszko, and S.C. Bai. 1998.

APPENDIX

Effects of fish meal replacement in rainbow trout diets on sperm quality. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.

- Dabrowski, K., J.H. Blom, K.J. Lee, A. Cierszki, and J. Rinchar. 1998. Cottonseed meal in grow-out and brood stock diets for rainbow trout. Fish Nutrition Workshop, Pine Bluff, Arkansas, August 13-15, 1998.
- Finck, J.L., and R.J. Sheehan. 1993. Daily activity patterns of mixed-gender and all-female rainbow trout in raceways. Presented at the 55th Midwest Fish & Wildlife Conference, Annual Meeting of the North-Central Division of the American Fisheries Society, St. Louis, Missouri, December 11-15, 1993. (Invited paper)
- Finck, J.L., and R.J. Sheehan. 1993. Daily activity patterns of mixed-sex and all-female rainbow trout in raceways. Presented at the Joint Meeting of the Illinois and Iowa Chapters of the American Fisheries Society, Bettendorf, Iowa, February 16-18. (Awarded Best Student Paper)
- Haley, D.I., and D.L. Garling. 1999. Evaluation of phytase pretreatment on all plant diets in rainbow trout (*Oncorhynchus mykiss*). 30th Annual Meeting of the World Aquaculture Society, Sydney, Australia, April 26-May 2, 1999.
- Lee, K.J., K. Dabrowski, J.H. Blom, S.C. Bai, and P. Stromberg. 1998. Fish meal replacement by animal and plant protein sources in juvenile rainbow trout, *Oncorhynchus mykiss* diets. Fish Nutrition Workshop, Pine Bluff, Arkansas, August 13-15, 1998.
- Lee, K.J., K. Dabrowski, and G. Mbahinzireki. 2000. Utilization of cottonseed meal in rainbow trout and Nile tilapia. Gossypol enantiomers in fish tissues. Aquaculture America 2000, New Orleans, Louisiana, February 2-5, 2000.
- Procarione, L.S., T.P. Barry, and J.A. Malison. 1996. A rapid corticosteroid stress response is correlated with superior growth in rainbow trout. Midwest Endocrinology Conference, The Society of Integrative and Comparative Biology, Madison, Wisconsin, June 22-23, 1996.
- Ramseyer, L.J., and D.L. Garling. 1997. Fish nutrition and aquaculture waste management. Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Riche, M., and P.B. Brown. 1993. Apparent phosphorus absorption coefficients for rainbow trout fed common feedstuffs. 24th Annual Meeting of the World Aquaculture Society, Torremolinos, Spain, May 26-28, 1993.
- Riche, M., M.E. Griffin, and P.B. Brown. 1994. Effect of dietary phytase pretreatment on phosphorus leaching from rainbow trout feces. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Sheehan, R.J. 1995. Applications of chromosome set manipulation to fisheries resource management. Presented at the University of Peru, Amazonia, Iquitos, Peru, August 17, 1995. (Invited paper)
- Sheehan, R.J., C. Habicht, and J.E. Seeb. 1994. Tolerance of triploid *Oncorhynchus* (coho, chinook, and rainbow trout) to aquaculture stressors. Presented at the 56th Midwest Fish and Wildlife Conference, Indianapolis, Indiana, December 4-7, 1994.

APPENDIX

SNAIL MANAGEMENT/GRUB CONTROL

Publications in Print

Noatch, M.R. 2010. An evaluation of chemical, biological, and combined chemical-biological approaches for controlling snails in aquaculture ponds. Master's thesis, Southern Illinois University-Carbondale.

Noatch, M.R. and G.W. Whitledge. 2011. An evaluation of hydrated lime and predator sunfish as a combined chemical-biological approach for controlling snails in aquaculture ponds. *North American Journal of Aquaculture* 73:53-59.

Papers Presented

Morris, J. E. 2014. Snail management in culture ponds: Role in limiting grub issues. North Central Aquaculture Conference, Toledo, Ohio, February 22-23, 2014.

Noatch, M.R. and G.W. Whitledge. 2009.

Comparison of biological, chemical, and integrated biological-chemical approaches for controlling aquaculture pond snails. Poster, 70th Midwest Fish and Wildlife Conference, Springfield, Illinois, December 6-9, 2009.

Noatch, M.R. and G.W. Whitledge. 2010.

Comparison of biological, chemical, and integrated biological-chemical approaches for controlling aquaculture pond snails. 48th Annual Meeting, Illinois Chapter of the American Fisheries Society, Whittington, Illinois, February 23-25, 2010.

Timmons, B.A., C.C. Green, and A.M. Kelly. 2008.

Snail consumption and preference by redear

sunfish (*Lepomis microlophus*) and redear sunfish × warmouth (*Lepomis gulosus*) hybrid. *Aquaculture America* 2008, Lake Buena Vista, Florida, February 9-12, 2008.

West, A.J., T. Huspeni, and C. Hartleb. 2008. Biological control of snails and associated parasites of fish in culture ponds. 69th Midwest Fish and Wildlife Conference, Columbus, Ohio, December 14-17, 2008.

West, A.J., T. Huspeni, and C. Hartleb. 2009. Biological control of snails and associated parasites of fish in culture ponds. Wisconsin Aquaculture Association Annual Conference, Hayward, Wisconsin, March 13-14, 2009.

Whitledge, G.W. 2008. Research on biological control of aquaculture pond snails at Southern Illinois University. Missouri Aquaculture Association Annual Meeting, Jefferson City, Missouri, January 12, 2008.

SUNFISH

Publications in Print

Brunson, M.W., and J.E. Morris. 2000. Species profile: sunfish. SRAC Publication No. 724, Southern Regional Aquaculture Center, Stoneville, Mississippi.

Bryan, M.D., J.E. Morris, and G.J. Atchison. 1994. Methods for culturing bluegill in the laboratory. *Progressive Fish-Culturist* 56:217-221.

Dvork, G., J.E. Morris, and C.C. Mischke. 2003.

Spawning behavior and early life history. Pages 4-11 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors.

APPENDIX

-
- Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Garling, D. 2003. Fee fishing. Pages 41-47 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Garling, D.L., P.D. Wilbert, A.R. Westmaas, S.M. Miller, R. Sheehan, P.S. Wills, and J.M. Paret. 2003. Production of polyploid sunfish. Pages 34-40 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Hayward, R.S., and H.P. Wang. 2002. Inherent growth capacity and social costs of bluegill and hybrids of bluegill and green sunfish: which fish really grows faster? *North American Journal of Aquaculture* 64:34-46.
- Hayward, R.S., and H.P. Wang. 2006. Rearing male bluegills indoors may be advantageous for producing food-size sunfish. *Journal of the World Aquaculture Society* 37:496-508.
- Hayward, R.S., D.B. Noltie, and N. Wang. 1997. Use of compensatory growth to double hybrid sunfish growth rates. *Transactions of the American Fisheries Society* 126:316-322.
- Hayward, R.S., N. Wang, and D.B. Noltie. 1999. Group holding impedes compensatory growth of hybrid sunfish. *Aquaculture* 183:43-52.
- Lane, R.L. 2001. Comparisons between bluegill and hybrid sunfish for food fish production. Master's thesis. Iowa State University, Ames, Iowa.
- Lane, R.L., and J.E. Morris. 2002. Comparison of prepared feed versus natural food ingestion between pond-cultured bluegill and hybrid sunfish. *Journal of the World Aquaculture Society* 33:517-519.
- Masagounder, K., J. Firman, R.S. Hayward, S. Sun, and P. Brown. 2009. Apparent digestibilities of common feedstuffs for bluegill, *Lepomis macrochirus* and largemouth bass, *Micropterus salmoides* using individual test ingredients. *Aquaculture Nutrition* 15(1):29-37.
- Miller, S. 1995. Tetraploid induction protocols for bluegill sunfish, *Lepomis macrochirus*, using cold and pressure shocks. Master's thesis. Michigan State University, East Lansing.
- Mischke, C.C. 1995. Larval bluegill culture in the laboratory. Master's thesis. Iowa State University, Ames.
- Mischke, C.C., and J.E. Morris. 1997. Out-of-season spawning of sunfish *Lepomis* spp. in the laboratory. *Progressive Fish-Culturist* 59:297-302.
- Mischke, C.C., and J.E. Morris. 1998. Growth and survival of larval bluegills in the laboratory under different feeding. *Progressive Fish-Culturist* 60:206-213.
- Mischke, C.C., and J.E. Morris. 1998. Review of bluegill and bluegill hybrid aquaculture. *Aquaculture Magazine* 24(5):30-38.
- Mischke, C.C., and J.E. Morris. 2003. Historical background. Pages 1-3 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Mischke, C.C., and J.E. Morris. 2003. Culture methods. Pages 12-18 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

-
- Mischke, C.C., and J.E. Morris. 2003. Brood stock management. Pages 19-24 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Mischke, C.C., and J.E. Morris. 2003. Water temperature influences on survival and growth. Pages 29-30 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Mischke, C.C., and J.E. Morris. 2003. Industry status. Pages 31-33 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Mischke, C.C., G.D. Dvorak, and J.E. Morris. 2001. Growth and survival of hybrid sunfish larvae in the laboratory under different feeding and temperature regimes. *North American Journal of Aquaculture* 63:265-271.
- Mischke, C.C., J.E. Morris, and D.L. Garling, editors. 2003. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Mischke, C.C., G. Dvorak, and J.E. Morris. In review. Hybridization. Pages 26-29 in C.C. Mischke and J.E. Morris, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Montes-Brunner, Y. 1992. Study of the developmental stages of bluegill (*Lepomis macrochirus*) eggs using selected histological techniques. Master's thesis. Michigan State University, East Lansing.
- Read, E.R. 1994. Cage culture of black, white and F₁ hybrid crappie (*Pomoxis* species). Master's thesis. Pittsburg State University, Pittsburg, Kansas.
- Riche, M., and D. Garling. 2003. Calculating chemical treatments. Pages 48-57 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Riche, M., and D. Garling. 2003. Collecting fish samples for disease diagnoses. Pages 69-83 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Shen, Z.G., and H.P. Wang. (in press). Hybridization in sunfishes. In *Sex Control in Aquaculture: Theory and Practice* (eds H.P. Wang, F. Piferrer and Song-Lin Chen), John Wiley & Sons, Ltd., Chichester.
- Sampson, T., and D. Garling. 2003. Common sunfish parasites. Pages 58-68 in J.E. Morris, C.C. Mischke, and D.L. Garling, editors. Sunfish culture guide. NCRAC Culture Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Thomas, G.L. 1995. Culture of white crappie (*Pomoxis annularis*) in a Recirculating System. Master's thesis, Pittsburg State University, Pittsburg, Kansas.
- Wang, N., R.S. Hayward, and D.B. Noltie. 1998. Effect of feeding frequency on food consumption, growth, size variation, and feeding pattern of age-0 hybrid sunfish. *Aquaculture* 165:261-267.
- Wang, N., R.S. Hayward, and D.B. Noltie. 1998. Variation in food consumption, growth, and growth efficiency among juvenile hybrid sunfish held in isolation. *Aquaculture* 167:43-52.

APPENDIX

-
- Wang, N., R.S. Hayward, and D.B. Noltie. 2000. Effects of social interaction on growth of juvenile hybrid sunfish held at two densities. *North American Journal of Aquaculture* 62:161- 167.
- Wang, H.P., Z. Gao, P. O'Bryant, J. D. Rapp, H. Yao, Xiao-juan Cao. 2014. Temperature effects and genotype-temperature interactions on sex determination in bluegill *Lepomis macrochirus*. *Aquaculture*. Volumes 420–421: S64– S71
- Wang, H.P., and Z.G. Shen (in press). Sex determination, differentiation and all-male production in bluegill. In *Sex Control in Aquaculture: Theory and Practice* (eds H.P. Wang, F. Piferrer and Song-Lin Chen), John Wiley & Sons, Ltd., Chichester.
- Westmaas, A.R. 1992. Polyploidy induction in bluegill sunfish (*Lepomis macrochirus*) using cold and pressure shocks. Master's thesis. Michigan State University, East Lansing.
- Wills, P.S. 1998. Induced triploidy in *Lepomis* sunfish and assessment of uses for triploid hybrid sunfish using a risk/benefit model. Doctoral dissertation. Southern Illinois University, Carbondale.
- Wills, P.S., J.P. Paret, and R.J. Sheehan. 1994. Induced triploidy in *Lepomis* sunfish and hybrids. *Journal of the World Aquaculture Society* 25(4):47-60.
- Wills, P.S., R.J. Sheehan, and S.K. Allen, Jr. 2000. Histology and DNA content in diploid and triploid hybrid sunfish. *Transactions of the American Fisheries Society* 129:30-40.
- Manuscript**
- Morris, J.E., R. Lane, and C.C. Mischke. In press. Culture and propagation of bluegill *Lepomis macrochirus* and its hybrids. In *Aquatic species cultured since 1897*. American Fisheries Society.
- Shen, Z. G., H.P. Wang, Y.H. Li, H. Yao, and N. Eissa. In Review. Temporal Expression of fox12 Gene during Early Life Stage in Bluegill (*Lepomis macrochirus*) Acclimated to Three Different Temperatures. *Aquaculture Research*.
- Non Peer-reviewed Extension Factsheets**
- Phase II production of *Lepomis macrochirus* comparing a “least-cost” diet to an “industry standard”. B.S. Senior Thesis. University of Wisconsin-Stevens Point. 11 p.
- Oral Presentations**
- Edwards, Winston, Wetzel, J., Omara-Alwala, T., Dudenhoefter, G. Lincoln University. Effects Of Initial Weight And Feeding Method On Feed Consumption Of Age-0 Northern Bluegill.). Missouri Academy of Science on April 22-23, 2016. <http://blogs.umsl.edu/infosec/files/2016/05/2016-MAS-ALL-Abstracts-Final.pdf>
- Grellner, Troy, Wetzel, J., Edwards, T. Lincoln University. Crispy Critters! So Good You'll Cry When Their Gone!). Missouri Academy of Science on April 22-23, 2016. <http://blogs.umsl.edu/infosec/files/2016/05/2016-MAS-ALL-Abstracts-Final.pdf>
- Morris, M., J. Wetzel, A. Ikem. 2016. Added Structure as Method to Promote Feed Intake and Growth of Black Crappie (*Pomoxis nigromaculatus*). Missouri Academy of Science on April 22-23, 2016. <http://blogs.umsl.edu/infosec/files/2016/05/2016-MAS-ALL-Abstracts-Final.pdf>
- Shen, Z.G., H.P. Wang, H. Yao, N. Eissa, H. Elabd, V. Kumar, D. Rapp, P. O'Bryant, K.Q. Zhu. 2014. Genotype- temperature interactions on sex determination in bluegill sunfish *Lepomis macrochirus*. Abstract in the Proceedings of the World Aquaculture Society Conference. Page 319. *Aquaculture America* 2014, Seattle, Washington.

APPENDIX

Timpe, Tricia, Bayan, R., Wetzel, J., Edwards, J. Lincoln University. Dietary Inclusion Of Biochar And Kaolin For Northern Bluegill Sunfish. . Missouri Academy of Science on April 22-23, 2016.
<http://blogs.umsl.edu/infosec/files/2016/05/2016-MAS-ALL-Abstracts-Final.pdf>

Timpe, T. R., J. E. Wetzel, J. T. Edwards, G. A. Dudenhoeffer. 2016. Effects of Vitamin Pre-mix, Ascorbic Acid, and Choline Chloride Supplementation on Growth and Survival of Northern Bluegill Sunfish (*Lepomis macrochirus macrochirus*). Missouri Academy of Science on April 22-23, 2016. <http://blogs.umsl.edu/infosec/files/2016/05/2016-MAS-ALL-Abstracts-Final.pdf>

Papers Presented

Brown, P.B., and K. Wilson. 1994. Experimental and practical diet evaluations with hybrid bluegill. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.

Hayward, R.S. 1998. Strategies for increasing growth rates and reducing size variation in hybrid sunfish. Missouri Joint Aquaculture Conference. Springfield, Missouri, March 4-6, 1998.

Hayward, R.S. 1999. New feeding strategies for sunfish. North Central Regional Aquaculture Conference, Columbia, Missouri, February 24- 26, 1999.

Hayward, R.S. 2001. New developments in ongoing sunfish aquaculture research. Meeting of the Missouri Aquaculture Coordinating Council, Warsaw, Missouri, July 10, 2001.

Hayward R.S. 2001. Contrasting results from efforts to elicit growth over-compensation in two fishes. Cost 827 Final Workshop Voluntary Food Intake in Fish, Reykjavik, Iceland, August 16-18, 2001.

Hayward, R.S. 2002. Rearing sunfish for the food market: overview of relevant research at the University of Missouri. Michigan Aquaculture Association Annual Conference, Cadillac, Michigan, February 7-8, 2002.

Hayward, R.S. 2002. Update on sunfish aquaculture research at the University of Missouri. Missouri Aquaculture Association Annual Conference, Jefferson City, Missouri, February 12-13, 2002.

Hayward, R.S. 2002. Techniques for rearing big bluegill faster. Nebraska Game and Parks Commission's Urban Fisheries Program, Gretna, Nebraska, September 18, 2002.

Hayward, R.S., C.V. Bove, D.B. Noltie, and N. Wang. 1997. Does the compensatory growth response of hybrid sunfish reflect patterns of food availability in nature? 127th Annual Meeting of the American Fisheries Society, Monterey, California, August 24-28, 1997.

Kohler, C.C., and J.E. Wetzel. 1997. Protein requirements of hybrid sunfish, *Lepomis cyanellus* H L. *macrochirus*, diets. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.

Kohler, C.C., and J.E. Wetzel. 1999. Sunfish nutrition. North Central Regional Aquaculture Conference, Columbia, Missouri, February 24- 26, 1999.

Lane, R.L., and J.E. Morris. 2001. Evaluation of bluegill *Lepomis macrochirus* and F₁ hybrid sunfish *L. cyanellus* H *L. macrochirus* pond culture. Annual Meeting of the World Aquaculture Society, Orlando, Florida, January 21-25, 2001.

Lane, R.L., and J.E. Morris. 2003. Evaluations of bluegill and F₁ hybrid sunfish pond culture. Annual Conference of the Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003.

APPENDIX

-
- Masagounder, K., R.S. Hayward, and J.D. Firman. 2009. Comparison of EAA requirements of juvenile bluegills determined via group versus individual housing. 32nd Fish Feed and Nutrition Workshop, Twin Falls, Idaho, August 4-7, 2009.
- Mischke, C.C., and J.E. Morris. 1996. Growth and survival of larval bluegill (*Lepomis macrochirus*) and hybrid sunfish (green sunfish, *L. cyanellus* H bluegill) in the laboratory under different feeding regimes. Iowa-Nebraska American Fisheries Society Meeting, Council Bluffs, Iowa, January 29-31, 1996.
- Mischke, C.C., and J.E. Morris. 1996. Early spawning of bluegill. Midcontinent Warmwater Fish Culture Workshop, Council Bluffs, Iowa, February 7, 1996.
- Mischke, C.C., and J.E. Morris. 1996. Growth and survival of larval bluegill, *Lepomis macrochirus*, in the laboratory under different feeding regimes. U.S. Chapter of the World Aquaculture Society, Arlington, Texas, February 14-17, 1996. (Awarded Best Student Poster)
- Morris, J.E. 1995. Hybrid bluegill culture update. Combined North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow (Second North Central Regional Aquaculture Conference), Minneapolis, Minnesota, February 17-18, 1995.
- Morris, J.E. 1995. Culture of bluegills under laboratory conditions. Nebraska Aquaculture Conference, North Platte, Nebraska, March 25, 1995.
- Morris, J.E. 1999. Overview of sunfish culture. North Central Regional Aquaculture Conference, Columbia, Missouri, February, 1999.
- Morris, J.E. 2000. Overview of sunfish culture in the U.S. Mid-Continental Warmwater Fish Culture Workshop, Council Bluffs, Iowa, February 7-9, 2000.
- Morris, J.E., and C.C. Mischke. 1999. Overview of sunfish culture. Aquaculture America >99, Tampa, Florida, January 27-30, 1999.
- Morris, J.E., C.C. Mischke, and G. Dike. 1997. Overview of *Lepomis* spp. culture in the U.S. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Morris, J.E., R. Lane, and C.C. Mischke. 2001. Culture potential of bluegill *Lepomis macrochirus* and its hybrids. Annual Meeting of the World Aquaculture Society, Orlando, Florida, January 21-25, 2001.
- Paret, J.M., R.J. Sheehan and S.D. Cherck. 1993. Growth performance of *Lepomis* diploid hybrids, triploid hybrids and parental species at five temperatures. Meeting of the Illinois and Iowa Chapters of the American Fisheries Society, Bettendorf, Iowa, February 16-18, 1993.
- Read, E.R., and J.R. Triplett. 1994. Cage culture of crappie. 56th Midwest Fish and Wildlife Conference, Indianapolis, Indiana, December 4- 7, 1994.
- Read, E.R., and J.R. Triplett. 1995. Cage culture of black, white and F₁ hybrid crappie (*Pomoxis* species). Kansas Commercial Fish Growers Association, McPherson, Kansas, February 2, 1995.

APPENDIX

-
- Sheehan, R.J., J.P. Paret, P.S. Wills, and J.E. Seeb. 1993. Induced triploidy and growth of *Lepomis* parental species, hybrid, and triploid hybrid at five temperatures, 8 to 28EC. Prospects for Polyploid Fish in Fisheries Management Symposium, 123rd Annual Meeting of the American Fisheries Society, Portland, Oregon, August 29-September 2, 1993. (Invited paper)
- Sheehan, R.J., J.M. Hennessy, J.M. Paret, and P.S. Wills. 1999. Selection of sunfish species. North Central Regional Aquaculture Conference, Columbia, Missouri, February 24-26, 1999.
- Tetzlaff, B., and P. Wills. 1991. Current trends in the culture of hybrid sunfish. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Thomas, G.L., and J.R. Triplett. 1994-1995. Close-loop white crappie (*Pomoxis annularis*) culture. 56th Midwest Fish and Wildlife Conference, Indianapolis, Indiana, December 4-7, 1994. Also presented at the Kansas Commercial Fish Growers Association Meeting, McPherson, Kansas, February 2, 1995 and Kansas Academy of Science Annual Meeting, Pittsburg State University, Pittsburg, Kansas, April 7, 1995.
- Wang, N., R.S. Hayward, and D.B. Noltie. 1997. Individual variation in growth, food consumption, and growth efficiency of hybrid sunfish due to genetic differences. 127th Annual Meeting of the American Fisheries Society, Monterey, California, August 24-28, 1997.
- Westmaas, A.R., W. Young, and D. Garling. 1991. Induction of polyploids in bluegills and chinook salmon. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Wetzel, J.E., and C.C. Kohler. 1997. Effects of protein levels in hybrid sunfish, *Lepomis cyanellus* H L. *macrochirus*, diets. Illinois Chapter of the American Fisheries Society Annual Meeting, Collinsville, Illinois, March 5- 7, 1997.
- Wills, P.S., R.J. Sheehan, and S.A. Allen, Jr. 1997. Sperm production, histology, and relative DNA content in gonadal tissues from diploid and triploid hybrid *Lepomis* sunfish. 127th Annual Meeting of the American Fisheries Society, Monterey, California, August 24-28, 1997.
- Wills, P.S., R.J. Sheehan, and S.K. Allen, Jr. 1997. Sperm production, histology, and relative DNA content in gonadal tissues from diploid and triploid hybrid *Lepomis* sunfish. Illinois Chapter of the American Fisheries Society Annual Meeting, Collinsville, Illinois, March 4-6, 1997.
- Peer-reviewed**
- Elabd, H., H. P. Wang, H. Yao, A. A. Shaheen, and A. Abbass. Chinese herb *Astragalus membranaceus* (AM) enhances growth performance and antioxidant stress profiles in bluegill sunfish (*Lepomis macrochirus*). *Fish Physiology and Biochemistry*, in revision.
- Elabd, H., H. P. Wang, V. Kumar, N. Eissa, Z. G. Shen, H. Yao, A. A. Shaheen, A. Abbass. 2015. Stress, immune and growth responses of bluegill sunfish (*Lepomis macrochirus*) to different environmental temperatures as referred by related gene expression. *SpringerPlus*, in review.
- Elabd, H., H.P.Wang, H. Yao, A.A. Shaheen, and A. Abbass. 2016. Chinese herb *Astragalus membranaceus* (AM) enhances growth performance and antioxidant stress profiles in bluegill sunfish (*Lepomis macrochirus*). *Fish Physiology and Biochemistry*, 42:955. DOI 10.1007/s10695-015-0188-9.
- Shen, Z. G and H. P. Wang. 2014. Molecular Players Involved in Temperature-Dependent Sex Determination and Sex Differentiation in Fish. *Genetics Selection Evolution*, 46:1-21.
- Shen, Z. G, H. P. Wang, H. Yao, P. O'Bryant, D. Rapp, and K. Q. Zhu. 2016. Sex determination in bluegill sunfish: Effect of temperature on sex ratio of four geographic strains. *The Biological Bulletin*, 230 (3): 197-208.

APPENDIX

Shen, Z. G, H. P. Wang, Y. H. Li, H. Yao, and N. Eissa. 2015. Temporal expression of foxl2 gene during early life stage in bluegill *Lepomis macrochirus* acclimated to three different temperatures. *Biology open*. In review.

Wang, H.P., Z. Gao, P. O'Bryant, J. D. Rapp, and H. Yao. 2014. Effects of temperature and genotype on sex determination and sexual size dimorphism of bluegill sunfish *Lepomis macrochirus*. *Aquaculture*, 420–421: S64–S71.

Posters

Phase II production of *Lepomis macrochirus* comparing a “least-cost” diet to an “industry standard”. Wisconsin Aquaculture Conference, Pewaukee, WI March 1-2, 2013. Sunfish Diet Comparison Studies in the North Central Region, Nutrition Workshop, Yellow Springs Ohio, Summary of Sunfish Research, NCRAC Annual Planning Workshop, Ames, IA, February, 2012.

Thesis

Hischke, J. 2012. Phase II production of *Lepomis macrochirus* comparing a “least-cost” diet to an “industry standard”. Thesis, University of Wisconsin-Stevens Point.

Zhigang, S. 2013. Sex control in yellow catfish and bluegill. Thesis, Huazhong Agricultural University and the Ohio State University.

TILAPIA

Publications in Print

Booton, G.C., L. Kaufman, M. Chandler, R. Oguto- Ohwayo, W. Duan, and P. Fuerst. 1999.

Evolution of the ribosomal RNA internal transcribed spacer one (ITS-1) in cichlid fishes of the Lake Victoria region. *Molecular Phylogenetics and Evolution* 11:273-282.

Fiumera, A.C. 1997. Use of microsatellite DNA to estimate the loss of genetic diversity in the Lake Victoria cichlid Species Survival Plan captive breeding program. Master’s thesis. Ohio State University, Columbus.

Fiumera, A.C., and P.A. Fuerst. 1997. Use of DNA microsatellite loci to study the maintenance of genetic variation in the captive managed populations of the Lake Victoria cichlid Species Survival Plan. Contribution No. 1 (1997), Museum of Zoology, Fish Division, Ohio State University, Columbus.

Fiumera, A.C., and P.A. Fuerst. 1997. Use of DNA microsatellite loci to estimate the effective population size of a captive-bred Lake Victoria cichlid managed within the Species Survival Plan (SSP). *The Ohio Journal of Science* 97(2):A-31.

Fiumera, A.C., P.G. Parker, and P.A. Fuerst. 2000. Effective population size and loss of genetic diversity in captive bred populations of a Lake Victoria cichlid. *Conservation Biology* 14:886- 892.

Fiumera, A.C., L. Wu, P.G. Parker, and P.A. Fuerst. 1999. Effective population size in the captive breeding program of the Lake Victoria Cichlid *Paralabidochromis chilotes*. *Zoological Biology* 18:215-222.

Fuerst, P., W. Mwanja, L. Kaufman, and G. C. Booton. 1997. Genetic phylogeography of introduced *Oreochromis niloticus* (Pisces: Cichlidae) in Uganda. Pages 87-96 in K. Fitzsimmons, editor. *Tilapia aquaculture, Proceedings of the Fourth International Symposium on Tilapia in Aquaculture (ISTA IV)*, Volume 1. Northeast Regional Agricultural Engineering Service, Ithaca.

Fuerst, P.A., Mwanja, W.W., and L. Kaufman. 2000.

The genetic history of the introduced Nile Tilapia of Lake Victoria (Uganda, East Africa): the population structure of *Oreochromis niloticus* (Pisces: Cichlidae) revealed by DNA microsatellite markers. Pages 30-40 in *Proceedings of the Fifth International Symposium on Tilapia in Aquaculture (ISTA V)*.

APPENDIX

- Garling, D., and M. Riche. 2003. Feeding tilapia in intensive recirculating systems. NCRAC Fact Sheet Series #114, NCRAC Publications Office, Iowa State University, Ames.
- Kasper, C.S., M.R. White, and P.B. Brown. 2000. Choline is required by tilapia when methionine is not in excess. *Journal of Nutrition* 130:238-242.
- Kelly, A.M., and C.C. Kohler. 2003. Effects of *Yucca shidigera* extract on growth, nitrogen retention, ammonia excretion, and toxicity in channel catfish *Ictalurus punctatus* and hybrid tilapia *Oreochromis mossambicus* H O. *Niloticus*. *Journal of the World Aquaculture Society* 34(2):156-161.
- Mwanja, W.W., L. Kaufman, and P.A. Fuerst. 1997. Genetic population structure and meristic characterization of populations of *Oreochromis niloticus* (Pisces: Cichlidae) of Lake Victoria Region and Lake Edward-Albert System (Uganda - E. Africa). *Proceedings of the 7th International Aquaculture Symposium, Swansea*.
- Mwanja, W.W., F. Bugenyi, L. Kaufman, and P. Fuerst. 1997. Genetic characterization of tilapiine stocks in the Lake Victoria Region. Pages 33-34 in R.S.V. Pullin, C.M.V. Casal, E.K. Abban, and T.M. Falk, editors. *Characterization of Ghanaian tilapia genetic resources for use in fisheries and aquaculture*. 52nd ICLARM Conference Proceedings.
- Mwanja, W., L. Kaufman, and P.A. Fuerst. 1998. A note on recent advances in the genetic characterization of Tilapia stocks in Lake Victoria region. *African Journal of Tropical Hydrobiology and Fisheries* 6:51-53.
- Mwanja, W.W., L. Kaufman, and P.A. Fuerst. 2000. Randomly amplified polymorphic DNA markers: conservation and management implications. *The Ohio Journal of Science* 100(1):A38.
- Riche, M.A. 2000. Effect of phytic acid on nitrogen retention in tilapia (*Oreochromis niloticus*). Doctoral dissertation. Michigan State University, East Lansing.
- Riche, M., and D.L. Garling, Jr. 2004. Effect of phytic acid on growth and nitrogen retention in tilapia, *Oreochromis niloticus* L. *Aquaculture Nutrition*. 10(6):389-400.
- Riche, M., N.L. Trottier, P. Ku., and D.L. Garling. 2001. Apparent digestibility of crude protein and apparent availability of individual amino acids in tilapia (*Oreochromis niloticus*) fed phytase pretreated soybean meal diets. *Fish Physiology and Biochemistry* 25:181-194. (Note: This article was actually published in 2003 with a 2001 publication date.)
- Riche, M., D.I. Haley, M. Oetker, S. Garbrecht, and D.L. Garling, Jr. 2004. Effect of feeding frequency on gastric evacuation and the return of appetite in tilapia (*Oreochromis niloticus*). *Aquaculture Nutrition* 234:657-673.
- Riche, M., M. Oetker, D.I. Haley, T. Smith, and D.L. Garling. 2004. Effect of feeding frequency on consumption, growth, and efficiency in juvenile tilapia (*Oreochromis niloticus*). *The Israeli Journal of Aquaculture-Bamidgeh* 56(4):247- 255.
- Twibell, R.G., and P.B. Brown. 1998. Optimum dietary crude protein for hybrid tilapia *Oreochromis niloticus* H O. *aureus* fed all-plant diets. *Journal of the World Aquaculture Society* 29:9-16.
- Wu, L., L. Kaufman, B. Porter, and P. Fuerst. 1997. Genetic variability and inter-population gene flow of *Astatoreochromis alluaudi* revealed by microsatellite data. Pages 316-317 in *Proceedings of the 77th Annual Meeting of the American Society of Ichthyologists and Herpetologists*.

APPENDIX

Papers Presented

Brown, P.B., R.G. Twibell, and J. Weigel. 1997. Minimum dietary crude protein for tilapia fed diets free of fish meal. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.

Fuerst, P.A., W.W. Mwanja, and L. Kaufman. 1998.

Use of DNA microsatellite markers to study genetic diversity in the species of the genus *Oreochromis* from the Lake Victoria region. Fisheries Society of the British Isles Symposium on Tropical Fish Biology.

Fuerst, P.A., W. Mwanja, I. Batjakas, G. Booton, and

L. Kaufman. 1998. Of Lake Victoria region Tilapiines: the isolated and displaced; the shrunk and native; the restricted and exotic; and the expanded and introduced. African Fish and Fisheries: Diversity and Utilisation, Grahamstown, South Africa.

Fuerst, P.A., and W.W. Mwanja. 2000. The opportunities and challenges to conservation of genetic biodiversity of the fishery of the Lake Victoria Region, East Africa. International

Conference on the Conservation of African Inland Fisheries, Jinja, Uganda.

Kaufman, L., W.W. Mwanja, and P.A. Fuerst. 1998. Conservation genetics of Tilapiine refugia in the Lake Victoria region. Fisheries Society of the British Isles Symposium on Tropical Fish Biology.

Mbahinzireki, G., and K. Dabrowski. 1997.

Production of male tilapia by heat-treatment of embryos and growth on different diets in recirculation systems. 28th Annual Meeting of the World Aquaculture Society, Seattle, February 19-23, 1997.

Mwanja, W., and P.A. Fuerst. 1999. How issues of genetic diversity affect management of African inland water fisheries: the example of the Lake Victoria Region (LVR) fishery. Symposium on Aquatic Conservation and Management in Africa, University of Florida, Gainesville.

Riche, M., and D.L. Garling, Jr. 1999. Digestibility and retention of nitrogen in tilapia (*Oreochromis niloticus*) fed phytase treated soybean meal in a recirculating system. 30th Annual Meeting of the World Aquaculture Society, Sydney, Australia, April 26-May 2, 1999.

VIRAL HEMORRHAGIC SEPTICEMIA (VHS)

Non-Peer-reviewed Extension Factsheets

Tuttle-Lau, M.T., K.A. Phillips, and M.P. Gaikowski.

2010. Evaluation of the efficacy of iodophor disinfection of walleye and northern pike eggs to eliminate viral hemorrhagic septicemia virus.

U.S. Geological Survey Fact Sheet 2009-3107.

Oral Presentations

Held, J.A., J.A. Malison, R.E. Kinnunen, R.E. Johnson, and S.E. Kaatz. VHS biosecurity workshops and the development of fish disease HACCP plans in the North Central Region of the US. Aquaculture America 2009, Seattle, Washington, February 16-19, 2009.

Kinnunen R.E. 2010. Biosecurity and VHS virus update. NCRAC Baitfish Workshop. La Crosse, WI. September 21, 2010.

Kinnunen, R.E., M.P. Gaikowski, M.T. Tuttle-Lau,

J.J. Rach, J.A. Malison, J.A. Held, R.E. Johnson, S.E. Kaatz, G.D. Dvorak. North Central Regional Aquaculture Center VHS Project. American Fisheries Society Fish Health Section Annual Conference, La Crosse, Wisconsin, August 1, 2012.

APPENDIX

Kinnunen, R.E., M.P. Gaikowski, M.T. Tuttle-Lau, J.J. Rach, J.A. Malison, J.A. Held, R.E. Johnson, S.E. Kaatz, G.D. Dvorak. North Central Regional Aquaculture Center VHS Project. American Fisheries Society Annual Conference, St. Paul, Minnesota, August 20, 2012.

Kinnunen, R.E., M.P. Gaikowski, M. North Central Regional Aquaculture Center Iodine as an Egg Disinfectant to Prevent VHS-Biosecurity and IAS-HACCP Outreach. 2014NCR Conference, Toledo, Ohio, February 23, 2014

Kinnunen R.E. and J. Gunderson. The HACCP Approach to Prevent the Spread of Aquatic Invasive Species by Aquaculture and Baitfish Operations. International Conference on Aquatic Invasive Species. Niagara Falls, Ontario, April 24, 2013.

Tuttle-Lau, M.T., K.A. Phillips and M.P. Gaikowski. An Evaluation of the Efficacy of Iodophor Disinfection of Walleye *Sander vitreum* and Northern pike *Esox lucius* to Control Viral Hemorrhagic Septicemia virus. 34th Annual Eastern Fish Health Workshop, Shepherdstown, West Virginia, May 24-28, 2010.

Publication in Print

Tuttle-Lau, M.T., K.A. Phillips, and M.P. Gaikowski. 2010. Evaluation of the efficacy of iodophor disinfection of walleye and northern pike eggs to eliminate viral hemorrhagic septicemia virus. U.S. Geological Survey Fact Sheet 2009-3107.

Papers Presented

Held, J.A., J.A. Malison, R.E. Kinnunen, R.E. Johnson, and S.E. Kaatz. 2009. VHS biosecurity workshops and the development of fish disease HACCP plans in the North Central Region of the US. Aquaculture America 2009, Seattle, Washington, February 16-19, 2009.

Kinnunen, R.E. 2010. Biosecurity and VHS virus update. NCRAC Baitfish Workshop, La Crosse, Wisconsin, September 21, 2010.

Tuttle-Lau, M.T., K.A. Phillips, and M.P. Gaikowski. 2010. An evaluation of the efficacy of iodophor disinfection of walleye *Sander vitreum* and northern pike *Esox lucius* to control viral hemorrhagic septicemia virus. 34th Annual Eastern fish Health Workshop, Shepherdstown, West Virginia, May 24-28, 2010.

WALLEYE

Publications in Print

Aubineau, C.M. 1996. Characterization of the supply of walleye fingerlings in the North Central Region of the U.S. Master's thesis. Illinois State University, Normal.

Barry, T.P., A.F. Lapp, L.S. Procarione, and J.A. Malison. 1995. Effects of selected hormones and male cohorts on final oocyte maturation, ovulation, and steroid production in walleye (*Stizostedion vitreum*). Aquaculture 138:331- 347.

Billington, N., R.J. Barrette, and P.D.N. Hebert.

1992. Management implications of mitochondrial DNA variation in walleye stocks. North American Journal of Fisheries Management 12:276-284.

Bristow, B.T. 1993. Comparison of larval walleye stocks in intensive culture. Master's thesis. Iowa State University, Ames.

APPENDIX

-
- Bristow, B.T., and R.C. Summerfelt. 1994. Performance of larval walleye cultured intensively in clear and turbid water. *Journal of the World Aquaculture Society* 25:454-464
- Bristow, B.T., and R.C. Summerfelt. 1996. Comparative performance of intensively cultured larval walleye in clear, turbid, and colored water. *Progressive Fish-Culturist* 58:1-10.
- Clayton, R.D., T.L. Stevenson, and R.C. Summerfelt. 1998. Fin erosion in intensively cultured walleye and hybrid walleye. *Progressive Fish-Culturist* 60:114-118.
- Clouse, C.P. 1991. Evaluation of zooplankton inoculation and organic fertilization for pond-rearing walleye fry to fingerlings. Master's thesis. Iowa State University, Ames.
- Czesny, S., M.A. Garcia-Abiado, K. Dabrowski, P. Bajer, and M. Zalewski. 2002. Comparison of foraging performance of diploid and triploid saugeyes (sauger H walleye). *Transactions of the American Fisheries Society* 131:980-985.
- DiStefano, R.J., T.P. Barry, and J.A. Malison. 1997. Correlation of blood parameters with reproductive problems in walleye in a Missouri impoundment. *Journal of Aquatic Animal Health* 9:223-229.
- Garcia-Abiado, M.A.R., W.E. Lynch, Jr., K. Dabrowski, S. Czesny, and J. Rinchar. 2002. Juvenile growth and survival of heat-shocked triploid hybrid saugeyes, *Stizostedion vitreum* H *S. canadense*. *Fisheries Management and Ecology* 9:105-110.
- Gunderson, J., P. Gaeden, and T. Hertz. 1996. Case study: walleye fingerling culture in undrainable, natural ponds. Pages 157-160 in R.C. Summerfelt, editor. *Walleye culture manual*. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Harder, T., and R.C. Summerfelt. 1996. Effects of tank color and size on the success of training walleye fingerlings to formulated feed. Pages 631-636 in G.S. Libey and M.B. Timmons, editors. *Successes and failures in commercial recirculating aquaculture*. Northeast Regional Agricultural Engineering Service (NRAES), NRAES-98, volume 2. Cornell University, Ithaca, New York.
- Harding, L.M., and R.C. Summerfelt. 1993. Effects of fertilization and of fry stocking density on pond production of fingerling walleye. *Journal of Applied Aquaculture* 2(3/4):59-79.
- Harding, L.M., C.P. Clouse, R.C. Summerfelt, and J.E. Morris. 1992. Pond culture of walleye fingerlings. NCRAC Fact Sheet Series #102, NCRAC Publications Office, Iowa State University, Ames.
- Held, J.A., and J.A. Malison. 1996. Culture of walleye to food size. Pages 231-232 in R.C. Summerfelt, editor. *Walleye culture manual*. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Held, J.A., and J.A. Malison. 1996. Pond culture of hybrid walleye fingerlings. Pages 311-313 in R.C. Summerfelt, editor. *Walleye culture manual*. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Kapuscinski, A.R., chair. 1995. Performance standards for safely conducting research with genetically modified fish and shellfish. Part I. Introduction and supporting text for flowcharts. In USDA, Agricultural Biotechnology Research Advisory Committee, Working Group on Aquatic Biotechnology and Environmental Safety. Office of Agricultural Biotechnology, Document No. 95-04.

APPENDIX

- Kapuscinski, A.R., chair. 1995. Performance standards for safely conducting research with genetically modified fish and shellfish. Part II. Flowcharts and accompanying worksheets. In USDA, Agricultural Biotechnology Research Advisory Committee, Working Group on Aquatic Biotechnology and Environmental Safety. Office of Agricultural Biotechnology, Document No. 95-05.
- Kapuscinski, A.R. 1996. Selective breeding of walleye: building block for indoor aquaculture. Pages 331-338 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Kinnunen, R.E. 1996. Walleye fingerling culture in undrainable ponds. Pages 135-145 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Luzier, J.M. 1993. The ecology of clam shrimp in fish culture ponds. Master's thesis. Iowa State University, Ames.
- Luzier, J.M., and R.C. Summerfelt. 1993. A review of the ecology and life history of clam shrimp (Order Spinicaudata, Laevicaudata, Formerly Order Conchostraca: Branchiopoda). *Prairie Naturalist* 25:55-64.
- Luzier, J.M., and R.C. Summerfelt. 1996. Effects of clam shrimp on production of walleye and northern pike and a review of clam shrimp control strategies. *Journal of Applied Aquaculture* 6(4):25-38.
- Luzier, J.M., and R.C. Summerfelt. 1997. Experimental demonstration of the effects of clam shrimp on turbidity of microcosms. *Progressive Fish-Culturist* 59:68-70.
- Malison, J.A., and M.A.R. Garcia-Abiado. 1996. Sex control and ploidy manipulations in yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*). *Journal of Applied Ichthyology* 12:189-194.
- Malison, J.A., and J.A. Held. 1996. Reproductive biology and spawning. Pages 11-18 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Malison, J.A., and J.A. Held. 1996. Habituating pond-reared fingerlings to formulated feed. Pages 199-204 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Malison, J.A., and J.A. Held. 1996. Reproduction and spawning in walleye. *Journal of Applied Ichthyology* 12:153-156.
- Malison, J.A., J.A. Held, L.S. Procarione, and M.A.R. Garcia-Abiado. 1998. The production of monosex female populations of walleye (*Stizostedion vitreum*) using intersex broodstock. *Progressive Fish-Culturist* 60(1):20-24.
- Malison, J.A., L.S. Procarione, A.R. Kapuscinski, T.P. Barry, and T.B. Kayes. 1994. Endocrine and gonadal changes during the annual reproductive cycle of the freshwater teleost, *Stizostedion vitreum*. *Fish Physiology and Biochemistry* 13:473-484.
- Malison, J.A., L.S. Procarione, T.B. Kayes, J. Hansen, and J.A. Held. 1998. Induction of out- of-season spawning in walleye (*Stizostedion vitreum*). *Aquaculture* 163:151-161.
- Malison, J.A., J.A. Held, L.S. Weil, T.B. Kayes, and G.H. Thorgaard. 2001. Manipulation of ploidy in walleye (*Stizostedion vitreum*) by heat shock and hydrostatic pressure shock. *North American Journal of Aquaculture* 63:17-24.

APPENDIX

- Marty, G.D., D.E. Hinton, R.C. Summerfelt. 1995. Histopathology of swimbladder noninflation in walleye (*Stizostedion vitreum*) larvae: role of development and inflammation. *Aquaculture* 138:35-48.
- Rieger, P.W. 1995. Behavior of larval walleye. Doctoral dissertation. Iowa State University, Ames.
- Rieger, P.W., and R.C. Summerfelt. 1997. The influence of turbidity on larval walleye, *Stizostedion vitreum*, behavior and development in tank culture. *Aquaculture* 159:19-32.
- Rieger, P.W., and R.C. Summerfelt. 1998. Microvideography of gas bladder inflation in larval walleye. *Journal of Fish Biology* 53:93-99.
- Summerfelt, R.C. 1991. Non-inflation of the gas bladder of larval walleye (*Stizostedion vitreum*): experimental evidence for alternative hypotheses of its etiology. Pages 290-293 in P. Lavens, P. Sorgeloos, E. Jaspers, and F. Ollevier, editors. LARVI '91 - Fish & Crustacean Larviculture Symposium. European Aquaculture Society, Special Publication No. 15, Gent, Belgium.
- Summerfelt, R.C. 1995. Pond- and tank-culture of fingerling walleyes: A review of North American practices. Pages 31-33 in P. Kestemont and K. Dabrowski, editors. Workshop on aquaculture of percids. First meeting of the European Workgroup on Aquaculture of Percids, Vaasa, Finland, August 23-24, 1995.
- Summerfelt, R.C. 1995. Production of advanced fingerling to food size walleye. Pages 48-52 in P. Kestemont and K. Dabrowski, editors. Workshop on aquaculture of percids. First meeting of the European Workgroup on Aquaculture of Percids, Vaasa, Finland, August 23-24, 1995.
- Summerfelt, R.C., editor. 1996. Walleye culture manual. NCRAC Culture Series #101, NCRAC Publications Office, Iowa State University, Ames.
- Summerfelt, R.C. 1996. Walleye culture manual: Preface. Pages xiii-xiv in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101. NCRAC Publications Office, Iowa State University, Ames.
- Summerfelt, R.C. 1996. Introduction. Pages 1-10 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101. NCRAC Publications Office, Iowa State University, Ames.
- Summerfelt, R.C. 1996. Intensive culture of walleye fry. Pages 161-185 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, North Central Regional Aquaculture Center Publications Office, Iowa State University, Ames.
- Summerfelt, R.C., C.P. Clouse, and L.M. Harding. 1993. Pond production of fingerling walleye, *Stizostedion vitreum*, in the northern Great Plains. *Journal of Applied Aquaculture* 2(3/4):33-58.
- Summerfelt, R.C., C.P. Clouse, L.M. Harding, and J.M. Luzier. 1996. Walleye fingerling culture in drainable ponds. Pages 89-108 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101, North Central Regional Aquaculture Center Publications Office, Iowa State University, Ames.
- Summerfelt, R.C., R.D. Clayton, J.A. Johnson, and R.E. Kinnunen. 2010. Production of walleye as potential food fish. NCRAC Fact Sheet Series #116. NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

Summerfelt, R.C., R.C. Clayton, T.K. Yager, S.T. Summerfelt, and K.L. Kuipers. 1996. Live weight-dressed weight relationships of walleye and hybrid walleye. Pages 241-250 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101. NCRAC

Publications Office, Iowa State University, Ames.

Summerfelt, S.T., and R.C. Summerfelt. 1996. Aquaculture of walleye as a food fish. Pages 215-230 in R.C. Summerfelt, editor. Walleye culture manual. NCRAC Culture Series #101. NCRAC Publications Office, Iowa State University, Ames.

Papers Presented

Barry, T.P., L.S. Procarione, A.F. Lapp, and J.A. Malison. 1992. Induced final oocyte maturation and spawning in walleye (*Stizostedion vitreum*). 23rd Annual Meeting of the World Aquaculture Society, Orlando, Florida, May 21-25, 1992.

Also presented at the Midwestern Regional Endocrinology Conference, Illinois State University, Normal, May 15-16, 1992, and the Endocrinology Reproductive Physiology Program Research Symposium, Madison, Wisconsin, September 10, 1992.

Bielik, I., and T.B. Kayes. 1995. Effects of aeration, fertilization, and sac-fry stocking rate on the large-scale production of fingerling walleye, *Stizostedion vitreum*, in earthen ponds. 26th Annual Meeting of the World Aquaculture Society, San Diego, California, February 1-4, 1995.

Bristow, B., and R.C. Summerfelt. 1993. The timing of critical events in the early development of larval walleye reared on formulated feed. Joint meeting, 31st annual meeting of the Illinois Chapter and 25th Annual Meeting of the Iowa Chapter of the American Fisheries Society, Bettendorf, Iowa, February 16-18, 1993.

Bristow, B.T., and R.C. Summerfelt. 1995. A production-scale evaluation of training and grower diets for the extensive-intensive production of advanced fingerling walleyes. 1995 Coolwater Fish Culture Workshop, State College, Pennsylvania, January 8-10, 1995.

Bristow, B.T., R.C. Summerfelt, and R. Clayton.

1995. Culture of larval walleye in clear, turbid, and colored water. Mid-Continent Fish Culture Workshop. Kansas City, Kansas, February 14- 15, 1995.

Bristow, B.T., R.C. Summerfelt, and R. Clayton.

1995. Culture of larval walleye in clear, turbid, and colored water. Iowa-Minnesota State Chapters, American Fisheries Society, Okoboji, Iowa, February 21-23, 1995.

Bushman, R.P., and R.C. Summerfelt. 1991. Effects of tank design on intensive culture of walleye fry. Coolwater Fish Culture Workshop, Springfield, Missouri, January 7-9, 1991.

Bushman, R.P., and R.C. Summerfelt. 1992. The effect of pH on gas bladder inflation of larval walleye. Coolwater Fish Culture Workshop, Carbondale, Illinois, January 6-8, 1992.

Clayton, R., and R.C. Summerfelt. 1995. Toxicity of hydrogen peroxide to juvenile walleye. 1995 Coolwater Fish Culture Workshop, State College, Pennsylvania, January 8-10, 1995.

Clayton, R., and R.C. Summerfelt. 1995. Toxicity of hydrogen peroxide to juvenile walleye. Mid-Continent Fish Culture Workshop Kansas City, Kansas, February 14-15, 1995.

Clouse, C., and R.C. Summerfelt. 1991. Evaluation of zooplankton inoculation and organic fertilization as management strategies for pond-rearing walleye fry to fingerlings. Coolwater Fish Culture Workshop, Springfield, Missouri, January 7-9, 1991.

APPENDIX

-
- Dabrowski, K. 2002. Status report on hybrid walleye rearing, polyploidy, and sex determination. NCRAC Hybrid Walleye Workshop, Cadillac, Michigan, February 7, 2002.
- Dabrowski, K., and M.A.R. Garcia-Abiado. 2002. All-female triploid production. Lake Erie-Inland Waters. Annual Research Review, Museum of Biological Diversity, Ohio State University. February 14-15, 2002.
- Dabrowski, K., M. Miller, A. Kramer, J. Grayson. 2020. Production of the gynogenetic female walleye *Sander vitreus* and induction of sex reversal with methyltestosterone. Aquaculture America 2020, Honolulu, Hawaii.
- Garcia-Abiado, M.A.R., K. Dabrowski, and M. Penn. 2002. Viability and sex ratios of progenies between sex-reversed, gynogenetic sauger males and walleye females. Aquaculture America 2002, San Diego, California, January 27-30, 2002.
- Garcia-Abiado, M.A., S.Czesny, and K. Dabrowski. 2004. Tank performance of larval saugeyes (walleye \times sauger) produced out-of-season and during regular season spawning. North American Journal of Aquaculture 66:48-52.
- Hayward, R.S. 2000. Review of aquaculture research at the University of Missouri-Columbia. Harry K. Dupree National Aquaculture Center, September 29, Stuttgart, Arkansas.
- Hayward, R. S. 2002. Growth rates of walleye in southern Missouri ponds. NCRAC Hybrid Walleye Workshop, Cadillac, Michigan, February 7, 2002.
- Held, J.A. 1996. Hybrid walleye - A candidate for intensive aquaculture? Aqua >96, Tenth Anniversary Minnesota Aquaculture Conference and Trade Show, Alexandria, Minnesota, March 8-9, 1996.
- Held, J.A. 2002. Growth and sex control of hybrid walleye. NCRAC Hybrid Walleye Workshop, Cadillac, Michigan, February 7, 2002.
- Held, J.A. 2002. Stress responses of salmonids and percids. Michigan Aquaculture Association Annual Conference, Cadillac, Michigan, February 7-8, 2002.
- Held, J.A., and J.A. Malison. 1998. Performance of hybrid walleye (*Stizostedion vitreum* *H.S. canadense*) derived from several geographic stocks. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Kapuscinski, A.R. 1995. The role of selective breeding in sustainable aquaculture. University of Minnesota, Lake Itasca Summer Program, Course on Sustainable Fisheries and Aquaculture.
- Kapuscinski, A.R., R.C. Summerfelt, B. Bristow, and M.C. Hove. 1994. Genetic components of early performance traits of intensively cultured walleye. Fifth International Symposium on Genetics in Aquaculture, Halifax, Nova Scotia, June 19-25, 1994.
- Kayes, T.B. 1995. Harvesting perch and walleye fingerlings from ponds. Nebraska Aquaculture Update & Spring Meeting, North Platte, Nebraska, March 25, 1995.
- Malison, J.A. 1995. Reproductive biology and control of spawning in walleye. Combined North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow (Second North Central Regional Aquaculture Conference), Minneapolis, Minnesota, February 17-18, 1995.
- Malison, J.A. 1997. Reproduction and sex reversal in yellow perch and walleye. Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.

APPENDIX

-
- Malison, J. A., and J.A. Held. 1995. Reproduction and spawning in walleye. PERCIS II, the Second International Percid Fish Symposium and the Workshop on Aquaculture of Percids, Vaasa, Finland, August 21-25, 1995.
- Malison, J.A., J.A. Held, and L.S. Procarione. 1994. The production of all-female populations of walleye (*Stizostedion vitreum*) using partially sex-inverted broodstock. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Malison, J.A., T.B. Kayes, L.S. Procarione, J.F. Hansen, and J.A. Held. 1994. Induction of out- of-season spawning in walleye (*Stizostedion vitreum*). 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Malison, J.A., J. Mellenthin, L.S. Procarione, T.P. Barry, and J.A. Held. 1997. The effects of handling on the physiological stress responses of yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*) at different temperatures. Martinique >97, Martinique, French West Indies, May 4-9, 1997.
- Malison, J.A., L.S. Procarione, A.R. Kapuscinski, and T.B. Kayes. 1992. Endocrine and gonadal changes during the annual reproductive cycle of walleye (*Stizostedion vitreum*). 23rd Annual Meeting of the World Aquaculture Society, Orlando, Florida, May 21-25, 1992. Also presented at the Endocrinology Reproductive Physiology Program Research Symposium, Madison, Wisconsin, September 10, 1992
- Marty, G.D., D.E. Hinton, and R.C. Summerfelt. 1994. Histopathology of swimbladder noninflation in walleye (*Stizostedion vitreum*) larvae: role of development and inflammation. International Symposium on Aquatic Animal Health, September 4-8, 1994.
- Miller, M., J. Grayson, K. Dabrowski. 2020. Induction of triploidy in walleye *Sander vitreus* and evaluation of growth differences between triploid, control, and hybrid walleye. Aquaculture America 2020, Honolulu, Hawaii.
- Moore, A., M. Prange, R.C. Summerfelt, B.T. Bristow, and R.P. Bushman. 1995. Culture of larval walleye, *Stizostedion vitreum*, fed formulated feed. 26th Annual Meeting of the World Aquaculture Society, San Diego, California, February 1-4, 1995.
- Phillips, T.A., and R.C. Summerfelt. 1995. Effects of feeding frequency on metabolism and growth of fingerling walleye in intensive culture. 1995 Coolwater Fish Culture Workshop, State College, Pennsylvania, January 8-10, 1995.
- Phillips, T.A., and R.C. Summerfelt. 1995. Effects of feeding frequency on metabolism and growth of fingerling walleye in intensive culture. Iowa- Minnesota State Chapters, American Fisheries Society, Okoboji, Iowa, February 21-23, 1995.
- Riepe, J.R. 1997. Revisiting retail and wholesale markets (walleye and yellow perch). Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Summerfelt, R.C. 1989. Research of activities of the NCRAC Walleye Work Group on pond and intensive culture of walleye. Symposium on Aquaculture: Current Developments and Issues. 51st Midwest Fish & Wildlife Conference, Springfield, Illinois, December 5-6, 1989.
- Summerfelt, R.C. 1991. Pond production of fingerling walleye in the northern Great Plains. Symposium on Strategies and Tactics for Management of Fertilized Hatchery Ponds, 121st Annual Meeting of the American Fisheries Society, San Antonio, Texas, September 12, 1991.
- Summerfelt, R.C. 1991. Non-inflation of the gas bladder of larval walleye (*Stizostedion vitreum*): experimental evidence for alternative hypotheses of its etiology. Larvi >91: International Symposium on Fish and Crustacean Larviculture, Ghent, Belgium, August 27-30, 1991.

APPENDIX

-
- Summerfelt, R.C. 1991. Walleye culture research sponsored by the North Central Regional Aquaculture Center (NCRAC). Walleye Technical Committee, North Central Division, American Fisheries Society, Work Group Meeting, Dubuque, Iowa, July 15-17, 1991.
- Summerfelt, R.C. 1991. Culture of walleye for food: a status report. 5th Annual Minnesota Aquaculture Conference, St. Paul, Minnesota, March 8-9, 1991.
- Summerfelt, R.C. 1992. Intensive walleye fry production. Aqua >92, 6th Annual Minnesota Aquaculture Conference, Duluth, Minnesota, March 6-7, 1992. (Invited speaker)
- Summerfelt, R.C. 1992. Intensive culture of walleye fry on formulated feeds: status report on problem of non-inflation of the gas bladder. Iowa Department of Natural Resources, Fisheries Bureau Statewide Meeting, Springbrook, March 3, 1992.
- Summerfelt, R.C. 1993. Production of fingerling walleye in drainable ponds. Aqua >93, 7th Annual Minnesota Aquaculture Conference, Alexandria, Minnesota, March 5-6, 1993. (Invited speaker)
- Summerfelt, R.C. 1994. Fish biology: a problem-solving tool for aquaculture. 56th Midwest Fish and Wildlife Conference, Indianapolis, Indiana, December 4-7, 1994. (Invited speaker)
- Summerfelt, R.C. 1994. Intensive culture of walleye from fry to food fish. Wisconsin Aquaculture >94, Wisconsin Aquaculture Conference, Stevens Point, Wisconsin, February 18-19, 1994.
- Summerfelt, R.C. 1995. Status report on the walleye culture manual. North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow (Second North Central Regional Aquaculture Conference), Minneapolis, Minnesota, February 17-18, 1995. (Invited speaker)
- Summerfelt, R.C. 1995. Pond culture of walleyes. Aquaculture Conference 95. Wisconsin Aquaculture Association, Stevens Point, Wisconsin March 17-18, 1995. (Invited speaker)
- Summerfelt, R.C. 1997. Water quality considerations for aquaculture. Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7.
- Summerfelt, R.C., and B.T. Bristow. 1995. Culture of larval walleye in clear, turbid, and colored water. 1995. Coolwater Fish Culture Workshop, State College, Pennsylvania, January 8-10, 1995.

WASTES/EFFLUENTS

Publications in Print

- Rosati, R., P.D. O'Rourke, K. Tudor, and R.D. Henry. 1993. Performance of a raceway and vertical screen filter while growing *Tilapia nilotica* under commercial conditions. Pages 303-214 in J-K. Wang, editor. Techniques for modern aquaculture. Publication No. P-0293, American Society of Agricultural Engineering, St. Joseph, Michigan.
- Summerfelt, R.C. 2003. Introduction. Pages 2-8 in R.C. Summerfelt and R.D. Clayton, editors. Aquaculture effluents: overview of EPA guidelines and standards and BMPs for ponds, raceways, and recycle systems. Proceedings of the conference. NCRAC Publications Office, Iowa State University, Ames.
- Summerfelt, R.C., and R.D. Clayton, editors. 2003. Aquaculture effluents: overview of EPA guidelines and standards and BMPs for ponds, raceways, and recycle systems. Proceedings of the conference, NCRAC Publications Office, Iowa State University, Ames.

APPENDIX

Summerfelt, R.C., and C.R. Penne. 2004. Evaluation of an external triple standpipe apparatus in a dual-drain, recirculating aquaculture system to reduce the solids load to the drum filter. Pages 322-331 in Proceedings Fifth International Conference on Recirculating Aquaculture, Roanoke, Virginia, July 22-25, 2004.

Summerfelt, R.C., and C.R. Penne. 2004. Evaluation of an external triple standpipe apparatus in a dual-drain, recirculating aquaculture system to reduce the solids load to the drum filter. Pages 322-331 in Proceedings Fifth International Conference on Recirculating Aquaculture, Roanoke, Virginia, July 22-25, 2004.

Summerfelt, R.C., and C.R. Penne. 2005. Solids removal in a recirculating aquaculture system where the majority of flow bypasses the microscreen filter. *Aquacultural Engineering* 33(3):214-224.

Summerfelt, R.C., and C.R. Penne. 2007. Septic tank treatment of the effluent from a small-scale commercial recirculating aquaculture system. *North American Journal of Aquaculture* 69:59-68.

Yeo, S.E., F.P. Binkowski, and J.E. Morris. 2004. Aquaculture effluents and waste by products: characteristics, potential recovery and beneficial reuse. NCRAC Technical Bulletin #119, NCRAC Publications Office, Iowa State University, Ames.

Manuscripts

Maher, J.P., I.R. Adelman, and J.N. Connor. In preparation. Suspended solids in recirculating aquaculture systems and their effect on growth of tilapia (*Oreochromis niloticus*) and bluegill (*Lepomis macrochirus*). *North American Journal of Aquaculture*.

Summerfelt, R.C., and C.R. Penne. In preparation. Nutrient retention of largemouth bass, hybrid striped bass, walleye, and rainbow trout polycultured in a recirculation aquaculture facility.

Papers Presented

Byrd, V., D.J. Reinemann, J. Hansen, J.A. Malison, and M.E. Raabe. 2001. Demonstration of the use of natural fiber filters and airlift pumps in recirculation aquaculture systems. Annual Meeting of the American Society of Agricultural Engineers, Sacramento, California, July 30- August 1, 2001.

Hinrichs, D., J. Webb, R. Rosati, and P. Foley. 1994. Effluent characterization from the production of *Oreochromis niloticus* in a modified Red Ewald- style recirculating system. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.

Raabe, J.K., and S.E. Yeo. 2002. Vermicomposting and vermiculture as a beneficial use for aquaculture waste. National Science Foundation Research Experience for Undergraduates, Milwaukee, Wisconsin, August 16, 2002.

Rosati, R., D. Hinrichs, and J. Webb. 1994. Biofilter performance during the production of *Oreochromis niloticus* in a modified Red Ewald- style recirculating system. 124th Annual Meeting of the American Fisheries Society, Halifax, Nova Scotia, August 21-25, 1994.

Rosati, R., P.D. O'Rourke, K. Tudor, and R.D. Henry. 1993. Performance of a raceway and vertical screen filter while growing *Tilapia nilotica* under commercial conditions. Techniques for Modern Aquaculture, Special Session at the Annual Meeting of the American Society of Agricultural Engineering, Spokane, Washington, June 21-23, 1993.

Rosati, R., J. Webb, D. Hinrichs, and P. Foley. 1993. Characteristics of the effluent from a recirculating aquaculture system. U.S. Chapter of the World Aquaculture Society, Hilton Head, South Carolina, January 27-30, 1993.

Smydra, T.M., and J.E. Morris. 1994. Characterization of aquaculture effluents from two Iowa hatcheries. Iowa Chapter, American Fisheries Society, Council Bluffs, Iowa, February 15-16, 1994.

APPENDIX

-
- Smydra, T.M., and J.E. Morris. 1994. Characterization of aquaculture effluents. 56th Midwest Fish and Wildlife Conference, Indianapolis, Indiana, December 4-7, 1994.
- Summerfelt, R.C., and C.R. Penne. 2004. Evaluation of an external triple standpipe apparatus in a recycle aquaculture system to reduce solid loads to the drum filter. Fifth International Conference on Recirculating Aquaculture, Roanoke, Virginia, July 22-25, 2004.
- Summerfelt, R.C., F.P. Binkowski, S.E. Yeo, J.A. Malison, and D.J. Reinemann. 2004. Current aquaculture wastes and effluents projects of the North Central Regional Aquaculture Center (NCRAC). Aquaculture 2004, Honolulu, Hawaii, March 1-5, 2004.
- Yeo, S.E. 2003. Vermiculture and vermicomposting for recycling perch culture biosolids from recirculating aquaculture systems. 32nd Meeting of the Wisconsin Chapter of the American Fisheries Society, Madison, Wisconsin, January 14-16, 2003.
- Yeo, S.E. 2003. Vermiculture and vermicomposting for recycling perch culture biosolids from recirculating aquaculture systems, Michigan Aquaculture Association, Cadillac, Michigan, February 12-14, 2003.
- Yeo, S.E. 2003. Vermiculture and vermicomposting for recycling perch culture biosolids from recirculating aquaculture systems, 10th Annual Wisconsin Aquaculture Conference, Stevens Point, Wisconsin, March 13-15, 2003.
- Yeo, S.E., F.P. Binkowski, and J.E. Morris. 2004. Aquaculture effluents and waste by products: characteristics, potential recovery and beneficial reuse.
- Yeo, S.E. 2005. Yellow perch production and costs: case studies of three Wisconsin RAS's. Nebraska Aquaculture Association and the SandHills Yellow Perch Cooperative, Kearney, Nebraska, February 26, 2005.
- Yeo, S.E. 2005. Yellow perch production and costs: case studies of three Wisconsin RAS's. Wisconsin Aquaculture Conference, Wisconsin Rapids, Wisconsin, March 11, 2005.

WHITE PAPERS

Publications in Print

- Gunderson, J.L., and P. Tucker. 2000. A white paper on the status and needs of baitfish aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Heidinger, R.C. 2000. A white paper on the status and needs of largemouth bass culture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Kinnunen, R.E. 2000. A white paper on the status and needs of salmonid aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Kohler, C.C. 2000. A white paper on the status and needs of hybrid striped bass aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Kohler, C.C. 2000. A white paper on the status and needs of tilapia aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Morris, J.E., and C.C. Mischke. 2000. A white paper on the status and needs of sunfish aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Peterson, H.C., and K. Fronc. 2005. A white paper on marketing research needs for the North Central Region. NCRAC, Michigan State University, East Lansing.

APPENDIX

- Summerfelt, R.C. 2000. A white paper on the status and needs of walleye aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Swann, L., and J.E. Morris. 2001. A white paper on the status and needs of aquaculture extension outreach for the North Central Region. NCRAC, Michigan State University, East Lansing.
- Malison, J.A. 2003. A white paper on the status and needs of yellow perch aquaculture in the North Central Region. NCRAC, Michigan State University, East Lansing.
- Westers, H. 2003. A white paper on the status and concerns of aquaculture effluents in the North Central Region. NCRAC, Michigan State University, East Lansing.

YELLOW PERCH

Publications in Print

- Barry, T.P., and J.A. Malison, editors. 2004.
Proceedings of Percis III: The Third International Percid Fish Symposium. University of Wisconsin Sea Grant Institute, Madison.
- Brown, P.B., and F. Barrows. 2002. Percids. Pages 219-229 in C. Webster and C. Lim, editors.
Nutrient requirements and feeding of finfish for aquaculture. CABI Publishing, New York, New York.
- Brown, P.B., and K. Dabrowski. 1995. Zootechnical parameters, growth and cannibalism in mass propagation of yellow perch. In P. Kestemont and K. Dabrowski, editors. Workshop on aquaculture of percids. Presses Universitaires de Namur, Namur, Belgium.
- Brown, P.B., K. Dabrowski, and D.L. Garling. 1995. Nutritional requirements and commercial diets for yellow perch. In P. Kestemont and K. Dabrowski, editors. Workshop on aquaculture of percids. Presses Universitaires de Namur, Namur, Belgium.
- Brown, P.B., K. Dabrowski, and D.L. Garling. 1996.
Nutrition and feeding of yellow perch (*Perca flavescens*). Journal of Applied Ichthyology 12:171-174.
- Brown, P.B., J.E. Wetzel, J. Mays, K.A. Wilson, C.S. Kasper, and J. Malison. 2002. Growth differences between stocks of yellow perch (*Perca flavescens*) are temperature dependent.
Journal of Applied Aquaculture 12:43-56.
- Cao, X, H. P. Wang, H. Yao, W. M. Wang, P. O'Bryant and D. Rapp. 2010. Correlations between Growth Traits and Heterozygosity, Allelic Distance (d2) at Microsatellite Loci in the Yellow Perch, *Perca flavescens*. Journal of Biotechnology 150: 2-3.
- Cao, X, H.P. Wang, H. Yao, P. O'Bryant, J. D. Rapp and G. K. Wallat. 2012. Evaluation of one-stage and two-stage selection in yellow perch I: genetic and phenotypic parameters for growth traits of F1 fish reared in ponds using microsatellite parentage. Journal of Animal Sciences 90:27-36.
- Dabrowski, K., and D.A. Culver. 1991. The physiology of larval fish: digestive tract and formulation of starter diets. Aquaculture Magazine 17:49-61.
- Dabrowski, K., D.A. Culver, C.L. Brooks, A.C. Voss, H. Sprecher F.P. Binkowski, S.E. Yeo, and A.M. Balogun. 1993. Biochemical aspects of the early life history of yellow perch (*Perca flavescens*). Pages 531-539 in Proceedings of the International Fish Nutrition Symposium, Biarritz, France, June 25-27, 1991.

APPENDIX

- Dabrowski, K. Production of the gynogenetic female walleye and induction of sex reversal with methyltestosterone. 2020. In: Sterility in Aquaculture – Advances, Performance, Impacts. World Aquaculture Magazine 51(2): 51.
- Deng, D. 2020. Feed management for yellow perch. Wisconsin Aquaculture Conference, March 5-7, 2020, Marshfield, Wisconsin (invited speaker).
- Deng, D. 2020. Metabolomics and nutrition responses in yellow perch fingerlings fed different dietary starches. Aquaculture American, World Aquaculture Society, Feb 9-12, 2020, Honolulu, Hawaii.
- Deng, D. 2020. Effects of different dietary carbohydrates on growth performance, health, and metabolites of yellow perch. Iowa, North Central Aquaculture Conference. January 30-Feb 2, 2020. Columbus, Ohio.
- Eissa, N., and H.P. Wang. 2013. Physiological stress response of yellow perch subjected to repeated handlings and salt treatments at different temperatures. North American Journal of Aquaculture 75:449–454
- Eissa, N., H. P. Wang, Z. G. Shen, E. A. ElGheit, A. A. Shaheen. 2015. Transcriptional expression of HSP-70, IGF-1 and four oxidative stress genes in response to handling and key environmental stressors in Yellow Perch (*Perca flavescens*). Genes (in revising)
- Elabd, H., H. P. Wang, H. Yao, A. A. Shaheen, and A. Abbass. Effect of Chinese herb *Glycyrrhiza glabra* (liquorice) and *Astragalus membranaceus* (AM) on antioxidant profiles in Yellow perch (*Perca flavescens*). Fish Physiology and Biochemistry. In revising.
- Garling, D.L. 1991. NCRAC research programs to enhance the potential of yellow perch culture in the North Central Region. Pages 253-255 in Proceedings of the North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Glass, R.J. 1991. The optimum loading and density for yellow perch (*Perca flavescens*) raised in a single pass, flow-through system. Master's thesis. Michigan State University, East Lansing.
- Gould, N.L., M.M. Glover, L.D. Davidson, and P.B. Brown. 2003. Dietary flavor additives influence consumption of feeds by yellow perch *Perca flavescens*. Journal of the World Aquaculture Society 34(3):412-417.
- Hayward, R.S., and N. Wang. 2001. Failure to induce over-compensation of growth in maturing yellow perch. Journal of Fish Biology 59:126-140.
- Jentoft, S., N. Topp, M. Seeliger, J.A. Malison, T.P. Barry, J.A. Held, S. Roberts, and F. Goetz. 2005. Lack of growth enhancement by exogenous growth hormone treatment in yellow perch (*Perca flavescens*) in four separate experiments. Aquaculture 250:471-479.
- Kestamont, P., E. Vandeloise, C. Mélard, P. Fontaine, and P.B. Brown. 2001. Growth and nutritional status of Eurasian perch *Perca fluviatilis* fed graded levels of dietary lipids with or without added ethoxyquin. Aquaculture 203:85-99.
- Ko, K. 1996. Effect of isoflavones and estradiol-17 β on growth and reproductive function in yellow perch (*Perca flavescens*). Master's thesis. University of Wisconsin-Madison.
- Ko, K., J.A. Malison, and J.D. Reed. 1999. Effect of genistein on the growth and reproductive function of male and female yellow perch (*Perca flavescens*). Journal of the World Aquaculture Society 30:73-79.
- Kolkovski, S., and K. Dabrowski. 1998. Off-season spawning of yellow perch. Progressive Fish- Culturist 60:133-136.

APPENDIX

- Kolkovski, S., S. Czesny, and K. Dabrowski. 2000. Use of krill hydrolysate as a feed attractant for fish larvae and juveniles. *Journal of the World Aquaculture Society* 31:81-88.
- Kolkovski, S., C. Yackey, S. Czesny, and K. Dabrowski. 2000. The effect of microdiet supplementation of dietary digestive enzymes and a hormone on growth and enzyme activity of yellow perch juveniles. *North American Journal of Aquaculture* 62:130-134.
- Li, Y. H. and H. P. Wang, P. O'Bryant, D. Rapp, H. Yao, and E. A. Waly. 2015. De novo transcriptome sequencing and analysis of male, pseudo-male and female yellow perch, *Perca flavescens*. *BMC Genomics*. In Review
- Malison, J.A. 1999. Current status of yellow perch: markets and culture. *Aquaculture Magazine* 25:28-41.
- Malison, J.A., and M.A.R. Garcia-Abiado. 1996. Sex control and ploidy manipulations in yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*). *Journal of Applied Ichthyology* 12:189-194.
- Malison, J.A., and J.A. Held. 1992. Effects of fish size at harvest, initial stocking density and tank lighting conditions on the habituation of pond-reared yellow perch (*Perca flavescens*) to intensive culture conditions. *Aquaculture* 104:67-78.
- Malison, J., and J. Held. 1995. Lights can be used to feed, harvest certain fish. *Feedstuffs* 67(2):10.
- Malison, J.A., J.A. Held, and T.P. Barry. 2004. Growth and reproductive development of triploid and shocked and unshocked diploid yellow perch (*Perca flavescens*). Pages 43-44 in T.P. Barry and J.A. Malison, editors. *Proceedings of Percis III: The Third International Percid Fish Symposium*. University of Wisconsin Sea Grant Institute, Madison.
- Malison, J.A., T.B. Kayes, J.A. Held, T.B. Barry, and C.H. Amundson. 1993. Manipulation of ploidy in yellow perch (*Perca flavescens*) by heat shock, hydrostatic pressure shock, and spermatozoa inactivation. *Aquaculture* 110:229-242.
- Malison, J.A., L.S. Procarione, J.A. Held, T.B. Kayes, and C.H. Amundson. 1993. The influence of triploidy and heat and hydrostatic pressure shocks on the growth and reproductive development of juvenile yellow perch (*Perca flavescens*). *Aquaculture* 116:121-133.
- Mandiki, R.S.M., J.A. Malison, J.A. Held, C. Rougeot, G. Blanchard, C. M elard, and P. Kestemont. 2004. Hybridization of Eurasian and yellow perch increases growth rate in offspring. Pages 47-48 in T.P. Barry and J.A. Malison, editors. *Proceedings of Percis III: The Third International Percid Fish Symposium*. University of Wisconsin Sea Grant Institute, Madison.
- Miller, M. 2020. Induction of female monosex polyploid Yellow perch (*Perca flavescens*) and production of monosex stocks in order to increase efficiency of Yellow perch aquaculture. Dissertation. Not yet available online. Ohio State University, Columbus, Ohio. (December 13, 2020).
- Oetker, M.A. 1998. Effects of parental size and age on larval growth and development: implications for improved intensive larval yellow perch (*Perca flavescens*) culture techniques. Master's thesis. Michigan State University, East Lansing.
- Rinchar, J., R. Becheret, and K. Dabrowski. 2008. Growth, survival, and body composition of yellow perch juveniles fed commercial and experimental diets. *North American Journal of Aquaculture* 70:74-79.
- Schmitz, A.M., Sepulveda-Villet, O.J. 2021. Short term temperature fluctuations affect embryonic and larval development of yellow perch (*Perca flavescens*). *J Aquac Mar Biol* . 2021;10(4):168-176. DOI: 10.15406/jamb.2021.10.00318

APPENDIX

- Sonya C. Ponzi, 2020. Evaluation of sperm cryopreservation for yellow perch (*Perca flavescens*) broodstock management. University of Wisconsin-Milwaukee, Milwaukee, Wisconsin. Not yet available online (December 19, 2020).
- Suchocki, C.R. and Sepulveda-Villet, O.J. 2019. The role of phototaxis in the initial swim bladder inflation of larval yellow perch (*Perca flavescens*). *International Aquatic Research*, pp.1-10.
- Twibell, R.G., and P.B. Brown. 1997. Dietary arginine requirement of juvenile yellow perch. *Journal of Nutrition* 127:1838-1841.
- Twibell, R.G., and P.B. Brown. 2000. Dietary choline requirement of juvenile yellow perch (*Perca flavescens*). *Journal of Nutrition* 130:95-99.
- Twibell, R.G., B.A. Watkins, and P.B. Brown. 2001. Dietary conjugated linoleic acids and lipid source alter fatty acid composition of juvenile yellow perch, *Perca flavescens*. *Journal of Nutrition* 131:2322-2328.
- Twibell, R.G., K.A. Wilson, and P.B. Brown. 2000. Dietary sulfur amino acid requirement of juvenile yellow perch fed the maximum cystine replacement value for methionine. *Journal of Nutrition* 130:612-616.
- Waly, E. A., Z. G. Shen, and H. P. Wang. 2015. Efficacy of formalin, iodine and sodium chloride in improvement of egg hatching rate and fry survival prior to the onset of exogenous feeding in yellow perch. *Aquaculture Research*, 1-9. doi:10.1111/are.12694
- Wang, H.P., H. Yao, P. O'Bryant, D. Rapp, G.K. Wallat, L.G. Tiu and R. MacDonald. 2011. Family-tank interactions on early growth performance of yellow perch reared in single family tanks versus mixed-family tanks as inferred using molecular pedigrees. *Aquaculture research* 42:1694-1702.
- Wang, H.P. M. L. Aslam, H. Yao, D. Rapp, P. O'Bryant. 2015. Genetic variability pattern of yellow perch over six generations of marker- aided cohort selection for growth. *Journal of Animal Sciences*. In Review.
- Wang, H.P., P. O'Bryant, D. Rapp, H. Yao, C. Hartle. 2014. Strategies, Responses and prospects of genetic improvement in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. *Aquaculture America 2014*, Seattle, Washington.
- Wang, H-P., P. O'Bryant, H. Yao, D. Rapp, C. Hartleb, W. Lynch, and L Aslam. 2014. Production performance and genetic variance of yellow perch over three generations of commercial-scale marker-aided cohort selection for growth. Abstract in the Proceedings of the World Aquaculture Society Conference. Adelaide, Australia.
- Williams, F., and C. Starr. 1991. The path to yellow perch profit through planned development. Pages 49-50 in *Proceedings of the North Central Regional Aquaculture Conference*, Kalamazoo, Michigan, March 18-21, 1991.
- Xu, Y.J., H.P. Wang, H. Yao, P. O'Bryant, and Q.Y. Wang. 2015. GH, IGF-I and IGF-II mRNA expression in fast and slow growing strains and families of yellow perch *Perca flavescens*. SpringerPlus (In review).
- Yackey, C. 1998. Physiology of early stage of yellow perch digestive tract enzymes and diet relationship. Master's thesis. Ohio State University, Columbus.
- Yao, H., H.P. Wang, P. O'Bryant and D. Rapp. 2014. Comparison of microsatellite-base and recorded pedigree in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. *Aquaculture America 2014*, Seattle, Washington.

APPENDIX

Non peer-reviewed Articles

“Klapper receives grant to sequence Great Lakes genomes”, printed and web article, 7-18-2017.

Milwaukee Journal Sentinel, “UWM researchers trying to put more perch on your table”.

Newspaper article, O.J. Sepulveda-Villet, D.F. Dng, R. Klapper, 8-21-2017.

UWM Research Magazine (formerly UWM Research Report), “Perched on an aquaculture breakthrough”
O.J. Sepulveda-Villet, 2-10-2018.

Non peer-reviewed Fact Sheets

On-farm tests show higher production, growth rate and survival of improved yellow perch, OARDIP Newsletter, 2013
(1): 1-2 (<http://southcenters.osu.edu/sites/southc/files/site-library/site-documents/aquaTeam-research/Winter%202013%20Newsletter.pdf>).

Magazine

http://ohioseagrant.osu.edu/_documents/twineline/v35i1.pdf).

Website (<http://southcenters.osu.edu/about-us/news/farm-tests-show-higher-production-growth-rate-and-survival-improved-perch>)

Oral Presentations

Wang, Han-ping. 2014. From markers to markets: Genetically improved yellow perch show a higher production, growth rate and survival by farm tests. Regional Aquaculture Extension Conference, Feb. 2014. STRATEGIES, RESPONSES AND PROSPECTS OF GENETIC IMPROVEMENT IN YELLOW PERCH.
American Aquaculture Conference, Seattle, Feb. 2014.

Papers Presented

Batterson, T., R. Craig, and R. Baldwin. 1995.

Advancing commercial aquaculture development in the North Central Region. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.

Binkowski, F. 1995. Intensive yellow perch fry rearing. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.

Binkowski, F.P. 2003. Intensive aquaculture technology (IAT): the cook book version. Aquaculture America 2003, Louisville, Kentucky, February 19, 2003.

Binkowski, F.P. 2005. Intensive aquaculture technology (IAT) for yellow perch: the cookbook version. Yellow Perch Workshop, Kearney, Nebraska, February 26, 2005.

Brown, P.B. 1994. Yellow perch culture in the Midwest. Vocational Agriculture Training Workshop, Greencastle, Indiana.

Brown, P.B. 1997. Recent developments in perch nutrition. Martinique >97, Island and Tropical Aquaculture, Les Trois Ilets, Martinique, French West Indies, May 4-9, 1997.

Brown, P.B. 2000. Percids: The American experience. 31st Annual Meeting of the World Aquaculture Society, Nice, France, May 2-6, 2000.

Brown, P.B. 2001. Yellow perch aquaculture and nutrition. Ohio Aquaculture Association Annual Meeting, Wooster, Ohio.

APPENDIX

-
- Brown, P.B. 2003. Nutrition and feeding of yellow perch. Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003.
- Brown, P.B. 2004. Nutrition of yellow perch *Perca flavescens*. Aquaculture 2004, Honolulu, Hawaii, March 1-4, 2004.
- Brown, P.B., and K. Dabrowski. 1995. Zootechnical parameters, growth and cannibalism in mass propagation of yellow perch. Workshop on Aquaculture of Percids, Vaasa, Finland, August 21-25, 1995.
- Brown, P.B., and R.G. Twibell. 1997. Dietary arginine requirement of juvenile yellow perch. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Brown, P.B., K. Dabrowski, and D. Garling. 1995. Nutritional requirements and commercial diets for yellow perch. Workshop on Aquaculture of Percids, Vaasa, Finland, August 21-25, 1995.
- Brown, P.B., D. Cartwright, R.G. Twibell, A. Bharadwaj, and B.A. Watkins. 2003. Dietary lipid studies with yellow perch (*Perca flavescens*). Percis III, Madison, Wisconsin, July 20-23, 2003.
- Brown, P.B., K. Wilson, J. Wetzel, J. Mays, F. Binkowski, and S. Yeo. 1994. Culture characteristics of juvenile yellow perch (*Perca flavescens*) from different geographical locales grown at three temperatures. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Brown, P.B., K. Wilson, J. Wetzel, J. Mays, F. Binkowski, and S. Yeo. 1994. Strain evaluations with yellow perch. Indiana Aquaculture Association Annual Meeting, Indianapolis, Indiana, February 26, 1994.
- Crane, P., G. Miller, J. Seeb, and R. Sheehan. 1991. Growth performance of diploid and triploid yellow perch at the onset of sexual maturation. 53rd Midwest Fish and Wildlife Conference, Des Moines, Iowa, November 30- December 4, 1991.
- Culver, D.A., and K. Dabrowski. 1998. Fertilization and stocking procedures for pond culture of percids. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Dabrowski, K. and S. Kolkovski. 1997. Larval fish rearing diets, enzymes, endocrine systems and what else. 14th Annual Meeting of the Canadian Aquaculture Association, Quebec City, Quebec, Canada, June 10-13, 1997.
- Deng, D. 2020. Feed management for yellow perch. Wisconsin Aquaculture Conference, March 5-7, 2020, Marshfield, Wisconsin (invited speaker).
- Deng, D. 2020. Metabolomics and nutrition responses in yellow perch fingerlings fed different dietary starches. Aquaculture American, World Aquaculture Society, Feb 9-12, 2020, Honolulu, Hawaii.
- Deng, D. 2020. Effects of different dietary carbohydrates on growth performance, health, and metabolites of yellow perch. Iowa, North Central Aquaculture Conference. January 30-Feb 2, 2020. Columbus, Ohio.
- Garling, D.L. 1991. NCRAC research programs to enhance the potential of yellow perch culture in the North Central Region. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Garling, D.L. 2000. Current status of flow-through grow-out production systems. North Central Regional Aquaculture Center Yellow Perch Producer Forum, Hudson, Wisconsin, January 21-22, 2000.
- Garling, D.L. 2000. Current status/recent advances of tank fry culture. North Central Regional Aquaculture Center Yellow Perch Producer Forum, Hudson, Wisconsin, January 21-22, 2000.
- Held, J.A. 1996. Yellow perch fingerling production is the black magic. Aqua >96, the Tenth Anniversary Minnesota Aquaculture Conference and Trade Show, Alexandria, Minnesota, March 8-9, 1996.

APPENDIX

-
- Held, J.A. 1997. Yellow perch production. Minnesota Aquaculture Association and North American Fish Farmers Cooperative Aquaculture Conference and Tradeshow, Brainerd, Minnesota, March 7-8, 1997.
- Held, J.A. 1997. Advances in yellow perch production. North Central Regional Aquaculture Center Symposium on Yellow Perch Production, Piketon, Ohio, June 21, 1997.
- Held, J.A. 2000. Yellow perch round table discussion. NCRAC Yellow Perch Producer Forum, Hudson, Wisconsin, January 21-22, 2000.
- Held, J.A. 2000. Current status/recent advances of feed-trained fingerling production. Wisconsin Aquaculture Something Special from Wisconsin, Oshkosh, Wisconsin, March 10-11, 2000.
- Held, J.A. 2001. Methods for producing yellow perch fingerlings. Wisconsin Aquaculture Something Special from Wisconsin, Middleton, Wisconsin, March 23-24, 2001.
- Held, J.A. 2002. Stress responses of salmonids and percids. Michigan Aquaculture Association Annual Meeting, Cadillac, Michigan, February 7-8, 2002.
- Held, J.A. 2002. 10 year perch development panel: what have we learned. Wisconsin Aquaculture Something Special from Wisconsin, Eau Claire, Wisconsin, March 15-16, 2002.
- Held, J.A. 2003. Stress responses of salmonids and percids. NCRAC New Aquaculture Species Workshop, Jackson, Missouri, March 5, 2003.
- Held, J.A. 2004. Inside Wisconsin aquaculture: an industry overview. Wisconsin Aquaculture Annual Conference, Oshkosh, Wisconsin, March 12-13, 2004.
- Held, J.A. 2004. Building markets for perch and bluegill. Wisconsin Aquaculture Annual Conference, Oshkosh, Wisconsin, March 12-13, 2004.
- Held, J.A. 2005. Pond grow-out of yellow perch: real farm numbers. Wisconsin Aquaculture Annual Conference, Wisconsin Rapids, Wisconsin, March 11-12, 2005.
- Held, J.A. 2005. Yellow perch and walleye: spawning, incubation, and hatching techniques for yellow perch and walleye. Indiana Aquaculture Association, Inc. Annual Meeting, Indianapolis, Indiana, March 26, 2005.
- Held, J.A., and D. La Bomascus. 2005. Marketing fish products. Wisconsin Aquaculture Annual Conference, Wisconsin Rapids, Wisconsin, March 11-12, 2005.
- Held, J.A., and J.A. Malison. 1997. Yellow perch aquaculture. Annual Conference of the Wisconsin Agricultural Teachers Association, Madison, Wisconsin, July 9-10, 1997.
- Held, J.A., J.A. Malison, and T.E. Kuczynski. 1998. Techniques for the commercial production of feed-trained yellow perch *Perca flavescens* fingerlings. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Kasper, C.S., B.A. Watkins, and P.B. Brown. 2003. Evaluation of two soybean meals fed to yellow perch, *Perca flavescens*. Aquaculture America 2003, Louisville, Kentucky, February 18-21, 2003.
- Kayes, T. 1994. Yellow perch aquaculture. Workshop on Getting Started in Commercial Aquaculture Raising Crayfish and Yellow Perch, Jasper, Indiana, October 14-15, 1994.
- Kayes, T. 1994. Investing in freshwater aquaculture: a reprise. Nebraska Aquaculture Update & Autumn Meeting, North Platte, Nebraska, November 19, 1994.

APPENDIX

-
- Kayes, T. 1995. Yellow perch aquaculture. Combined North Central and Ninth Annual Minnesota Aquaculture Conference and Tradeshow (Second North Central Regional Aquaculture Conference), Minneapolis, Minnesota, February 17-18, 1995.
- Kayes, T. 1995. Yellow perch culture studies at Pleasant Valley Fish Farm. Nebraska Aquaculture Update & Spring Meeting, North Platte, Nebraska, March 25, 1995.
- Kayes, T. 1995. Harvesting perch and walleye fingerlings from ponds. Nebraska Aquaculture Update & Spring Meeting, North Platte, Nebraska, March 25, 1995.
- Kayes, T. 1995. Spawning and incubation of yellow perch. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Kayes, T. 1995. Fingerling yellow perch production in ponds. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Kayes, T. 1995. Yellow perch food fish production in ponds and cages. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Kolkovski, S., K. Dabrowski, and C. Yackey. 1997. Larval rearing of yellow perch *Perca flavescens* spawning out of the season. 2nd International Workshop on Aquaculture of Percid Fish, Island and Tropical Aquaculture, Les Trois Ilets, Martinique, French West Indies, May 3-7, 1997.
- Kolkovski, S., K. Dabrowski, and C. Yackey. 1997. Weaning diets for yellow perch *Perca flavescens* suitability of commercial, semi-commercial, and experimental dry formulations. Fish Feed and Nutrition Workshop, Frankfort, Kentucky, September 12-13, 1997.
- Kolkovski, S., S. Dzesny, C. Yackey, and K. Dabrowski. 1998. The use of krill hydrolysate as feed attractant for fish juveniles. Fish Feed and Nutrition Workshop, Pine Bluff, Arkansas, September 13-15, 1998.
- Malison, J.A. 1994. Pond production of yellow perch fingerlings. Wisconsin Aquaculture >94, Stevens Point, Wisconsin, February 18-19, 1994.
- Malison, J.A. 1995. Production methods for yellow perch. Wisconsin Aquaculture >95, Stevens Point, Wisconsin, March 17-19, 1995.
- Malison, J.A. 1997. Reproduction and sex reversal in yellow perch and walleye. Third North Central Regional Aquaculture Conference, Indianapolis, Indiana, February 6-7, 1997.
- Malison, J.A. 1997. Factors promoting and constraining the commercial culture of yellow perch, *Perca flavescens*. 28th Annual Meeting of the World Aquaculture Society, Seattle, Washington, February 19-23, 1997.
- Malison, J.A. 1998. Raising food-size yellow perch in ponds. Wisconsin Aquaculture >98, Eau Claire, Wisconsin, March 13-14, 1998.
- Malison, J.A. 1999. Current status of yellow perch (*Perca flavescens*) markets and culture. Aquaculture America >99, Tampa, Florida, January 27-30, 1999.
- Malison, J.A. 1999. Sex control and ploidy manipulations in yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*). Aquaculture America >99, Tampa, Florida, January 27-30, 1999.

APPENDIX

- Malison, J.A. 2001. The potential and status of yellow perch as an aquaculture species. Annual Conference of the Ohio Aquaculture Association, New Philadelphia, Ohio, July 20- 21, 2001.
- Malison, J.A. 2001. Yellow perch growout in ponds. Annual Conference of the Ohio Aquaculture Association, New Philadelphia, Ohio, July 20- 21, 2001.
- Malison, J.A., and J.A. Held. 1995. Sex control and ploidy manipulations in yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*). Percid II, the Second International Percid Fish Symposium and the Workshop on Aquaculture of Percids, Vaasa, Finland, August 21-25, 1995.
- Malison, J.A., and J.A. Held. 1996. Pond design, construction and management. Wisconsin Aquaculture Conference >96, Wausau, Wisconsin, February 16-17, 1996.
- Malison, J.A., and J.A. Held. 1997. Pond design and construction for aquaculture. Wisconsin Aquaculture >97, Stevens Point, Wisconsin, March 14-15, 1997.
- Malison, J.A., J.A. Held, and C.H. Amundson. 1991. Factors affecting the habituation of pond-reared yellow perch (*Perca flavescens*), walleye (*Stizostedion vitreum*), and walleye-sauger hybrids (*S. vitreum* female H *S. canadense* male) to intensive culture conditions. 22nd Annual Meeting of the World Aquaculture Society, San Juan, Puerto Rico, June 16-20, 1991.
- Malison, J.A., D.L. Northey, J.A. Held, and T.E. Kuczynski. 1994. Habituation of yellow perch (*Perca flavescens*) fingerlings to formulated feed in ponds using lights and vibrating feeders. 25th Annual Meeting of the World Aquaculture Society, New Orleans, Louisiana, January 12-18, 1994.
- Malison, J.A., J.A. Held, M.A.R. Garcia-Abiado, and L.S. Procarione. 1996. The influence of triploidy and heat and hydrostatic pressure shocks on the growth and reproductive development of perch (*Perca flavescens*) reared to adult size under selected environmental conditions. International Congress on the Biology of Fishes, San Francisco, California, July 14-18, 1996 and Midwest Endocrinology Conference, Madison, Wisconsin, June 22-23, 1996.
- Malison, J.A., J.A. Held, L.S. Procarione, T.B. Kayes, and C.H. Amundson. 1991. The influence on juvenile growth of heat and hydrostatic pressure shocks used to induce triploidy in yellow perch. 121st Annual Meeting of the American Fisheries Society, San Antonio, Texas, September 8-12, 1991.
- Malison, J.A., J. Mellenthin, L.S. Procarione, T.P. Barry, and J.A. Held. 1997. The effects of handling on the physiological stress responses of yellow perch (*Perca flavescens*) and walleye (*Stizostedion vitreum*) at different temperatures. 2nd International Workshop on Aquaculture of Percid Fish, Island and Tropical Aquaculture, Les Trois Ilets, Martinique, French West Indies, May 4-9, 1997.
- Malison, J.A., J. Mellenthin, A.B. Head, L.S. Procarione, T.P. Barry, and J.A. Held. 1998. Cortisol stress responses and growth of yellow perch *Perca flavescens* reared under selected intensive culture conditions. 29th Annual Meeting of the World Aquaculture Society, Las Vegas, Nevada, February 15-19, 1998.
- Malison, J.A., S. Jentoft, N. Topp, M. Seeliger, T.P. Barry, and J.A. Held. 2004. Minimal activity of exogenous growth hormone treatment in perch *Perca flavescens* and *Perca fluviatilis* in four separate experiments. Aquaculture 2004, Honolulu, Hawaii, March 1-4, 2004.
- Miller, M. and K. Dabrowski. 2019. Too hot to be female? Determination of the effect of temperature on gonadal differentiation in yellow perch *Perca flavescens*. Abstract Publication and Oral Presentation*, World Aquaculture Society 2019, New Orleans, Louisiana (March 2019)
- Miller, M. 2020. Induction of female monosex polyploid Yellow perch (*Perca flavescens*) and production of monosex stocks in order to increase efficiency of Yellow perch aquaculture. Dissertation. Not yet available online. Ohio State University, Columbus, Ohio. (December 13, 2020).

APPENDIX

-
- Neuse, J. 2005. Development and maintenance of yellow perch broodstock. Yellow Perch Workshop, Kearney, Nebraska, February 26, 2005.
- Oetker, M., and D.L. Garling. 1997. The effects of maternal size on growth and survivorship of larval yellow perch. 127th Annual Meeting of the American Fisheries Society, Monterey, California, August 24-28, 1997.
- Riepe, J.R., J. Ferris, and D. Garling. 1995. Economic considerations in yellow perch aquaculture. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Selock, D. 1995. Floating raceways for yellow perch culture. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Suchocki, C. R., and O.J. Sepulveda-Vileet. 2019. The role of phototaxis in the initial swim bladder inflation of larval yellow perch (*Perca flavescens*). Abstract Publication and Oral Presentation*, World Aquaculture Society 2019, New Orleans, Louisiana (March 2019).
- Sonya C. Ponzi, 2020. Evaluation of permcryopreservation for yellow perch (*Perca flavescens*) broodstock management. University of Wisconsin-Milwaukee, Milwaukee, Wisconsin. Not yet available online (December 19, 2020).
- Starr, C. 1995. Yellow perch food fish production in flowing water systems. Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Twibell, R.G., and P.B. Brown. 1999. Dietary choline requirement of juvenile yellow perch. Aquaculture America '99, Tampa, Florida, January 27-30, 1999.
- Twibell, R.G., B.A. Watkins, and P.B. Brown. 2002. Dietary conjugated linoleic acids and lipid source alter juvenile yellow perch, *Perca flavescens*. Aquaculture America 2002, San Diego, California, January 27-30, 2002.
- Wallat, G., L. Wright, L. Tiu, and D. McFeeters. 2004. Performance and economic evaluation of tank, raceway and pond cage culture systems in the production of food-sized yellow perch, *Perca flavescens*. Aquaculture 2004, Honolulu, Hawaii, March 1-4, 2004.
- Williams, F. 1995. Federal grant opportunities? Yellow Perch Aquaculture Workshop, Spring Lake, Michigan, June 15-16, 1995.
- Williams, F., and C. Starr. 1991. The path to yellow perch profit through planned development. First North Central Regional Aquaculture Conference, Kalamazoo, Michigan, March 18-21, 1991.
- Yackey, C., S. Kolkovski, and K. Dabrowski. 1997. Weaning diets for yellow perch (*Perca flavescens*) suitability of commercial, semi-commercial, and experimental dry formulations. Fish Feed and Nutrition Workshop, Frankfort, Kentucky, September 21, 1997.
- Yeo, S.E. 2003. Vermiculture and vermicomposting for recycling perch culture biosolids from recirculating aquaculture systems. 10th Annual Wisconsin Aquaculture Conference, Stevens Point, Wisconsin, March 13-15, 2003.
- Yeo, S.E. 2005. Yellow perch production and costs: case studies of three Wisconsin RASs. Yellow Perch Workshop, Kearney, Nebraska, February 26, 2005.
- Yeo, S.E. 2005. Yellow perch production and costs: case studies of three Wisconsin RASs. Wisconsin Aquaculture Conference, Wisconsin Rapids, Wisconsin, March 11, 2005.

APPENDIX

Yackey, C., S. Czesny, S. Kolkovski, and K. Dabrowski. 1998. Effect of digestive enzyme and hormone on growth and digestive tract enzyme activity of yellow perch *Perca flavescens*. International Congress on the Biology of Fish, Baltimore, Maryland.

Yeo, S.E. 2003. Vermiculture and vermicomposting for recycling perch culture biosolids from recirculating aquaculture systems. Michigan Aquaculture Association Annual Meeting, Cadillac, Michigan, February 12-14, 2003.

Posters

Wang, Han-ping. 2014. Evaluate accuracy of microsatellite DNA marker-based pedigree using known pedigree in yellow perch. American Aquaculture Conference, Seattle, Feb. 2014.

Presentations

Eissa, N., H.P. Wang, Z.G. Shen, H. Yao, P. O'Bryant, and D. Rapp. 2013. Physiological and molecular stress response of yellow perch Subjected to handlings at different temperatures. Abstract in the Proceedings of the World Aquaculture Society Conference. Page 300. February 22-25, 2013. Nashville.

Kumar, V., H.P. Wang, Z.G. Shen, N. Eissa, H. Yao, H. Elabd, D. Rapp, P.O'Bryant. 2014. Nutritional quality of different strains of yellow perch: implications to human nutrition. Abstract in the Proceedings of the World Aquaculture Society Conference. Page 369. Aquaculture America 2014, Seattle, Washington.

Kwasek, K., H. P. Wang, J. M. Reddish and M. Wick. 2011. Proteomic analysis of muscle proteins from fast- and slow-growing yellow perch *perca flavescens*. Abstract in the Proceedings of the World Aquaculture Society Conference. March 1-5, 2011. New Orleans, USA.

Wang, H.P., H. Yao, P. O'Bryant, D. Rapp. L. Tiu and G. Wallat. 2013. Commercial-scale marker- aided cohort selection for growth in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. Page 1142. February 22-25, 2013. Nashville.

Wang, H.P., H. Yao, P. O'Bryant, D. Rapp. L. Tiu and G. Wallat. 2012. From markers to markets: Genetic improvement of yellow perch through commercial-scale marker- aided cohort selection for growth. The International Symposium on Genetics in Aquaculture XI. June 24-29, 2012, Auburn University

Wang, H.P. 2013. From mass to MAS, how to position us: An example of genetic selection in yellow perch. The Proceedings of the Chinese Engineering Science and Technology Forum on "Science and Technology Innovation for Aqua- Breeding and Sustainable Development of Aquaculture". May 27-29, 2013. Weihai, China.

Wang, H.P., P. O'Bryant, H. Yao, D. Rapp. Y. H. Li, C. Hartleb and W. Lynch. 2015. Genetic improvement of yellow perch I: Progress, Practice and Prospects. The International Symposium on Genetics in Aquaculture XII. June 21-27, 2015, Santiago, Spain.

Wang, H.P., P. O'Bryant, H. Yao, D. Rapp. C. Hartleb and W. Lynch. 2015. Genetic improvement of yellow perch II: production performance and genetic variability of selected populations. The International Symposium on Genetics in Aquaculture XII. June 21-27, 2015, Santiago, Spain.

Wang, H-P., P. O'Bryant, H. Yao, D. Rapp, C. Hartleb, W. Lynch, and L Aslam. 2014. Production performance and genetic variance of yellow perch over three generations of commercial-scale marker-aided cohort selection for growth. Abstract in the Proceedings of the World Aquaculture Society Conference. Adelaide, Australia.

APPENDIX

- Wang, H.P., P. O'Bryant, D. Rapp, H. Yao, C. Hartle. 2014. Strategies, Responses and prospects of genetic improvement in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. Aquaculture America 2014, Seattle, Washington.
- Xie, Z. G., H. P. Wang, Z. G. Shen†, and Y. H. Li. 2015. The mechanism of circadian clock regulating reproductive endocrine and gonad development of yellow perch at a simulated low temperature. Abstract in the Proceedings of the World Aquaculture Society Conference, https://www.was.org/meetings/mobile/MG_Paper.aspx?i=34545. Aquaculture America 2015, New Orleans.
- Xu, Y.J., H.P. Wang, H. Yao, P. O'Bryant, and Q.Y. Wang. 2012. GH, IGF-I and IGF-II mRNA expression in fast and slow growing strains and families of yellow perch *Perca flavescens*. The International Symposium on Genetics in Aquaculture XI. June 24-29, 2012, Auburn University.
- Yao, H., H.P. Wang, P. O'Bryant and D. Rapp. 2015. Assignment of power of marker sets and computer programs for parentage and sibship analysis in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference, <https://www.was.org/Meetings/ShowAbstract.aspx?Id=34940>. Aquaculture America 2015, New Orleans.
- Yao, H., H.P. Wang, P. O'Bryant and D. Rapp. 2014. Comparison of microsatellite-base and recorded pedigree in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. Aquaculture America 2014, Seattle, Washington.
- Yao, H., H.P. Wang, A. Zhan, P. O'Bryant, and D. Rapp. Evaluate accuracy of microsatellite DNA marker-based pedigree using known pedigree in yellow perch. Abstract in the Proceedings of the World Aquaculture Society Conference. Page 478. February 22-25, 2013. Nashville.