

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

US Army Corps of Engineers

U.S. Department of Defense

2009

Missouri River Recovery - Integrated Science Program

Follow this and additional works at: <https://digitalcommons.unl.edu/usarmyceomaha>



Part of the [Civil and Environmental Engineering Commons](#)

"Missouri River Recovery - Integrated Science Program" (2009). *US Army Corps of Engineers*. 67.
<https://digitalcommons.unl.edu/usarmyceomaha/67>

This Article is brought to you for free and open access by the U.S. Department of Defense at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in US Army Corps of Engineers by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



Missouri River Recovery - Integrated Science Program July 2008 – July 2009 Science Products

[System-wide Status Reports, Guidance Documents & Standard Operating Plans](#)

U.S. Army Corps of Engineers. 2009. 2008 Annual Implementation Report for the 2003 Amended Biological Opinion on the Operation of the Missouri River Main Stem System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas River Reservoir System: Missouri River Recovery Program. 70 p. Mike George, Program Manager.

Welker, T.L., and M.R. Drobish (editors). 2009. Missouri River Standard Operating Procedures for Fish Sampling and Data Collection, Volume 1.4. U.S. Army Corps of Engineers, Missouri River Recovery Program. 209 p. Dr. Tim Welker, Project Manager.

U.S. Army Corps of Engineers. 2009. Predation Management Plan for Least Tern and Piping Plover Habitat along the Missouri River: Missouri River Recovery Program. 46 p. Greg Pavelka, Project Manager.

Pavelka G., Huber C., Bormann E. 2009. Least Tern and Piping Plover Monitoring Handbook. U.S. Army Corps of Engineers, Missouri River Recovery Program, 151 p. Greg Pavelka, Project Manager.

[Pallid Sturgeon](#)

Welker, T.L., and M.R. Drobish (editors). 2009. Pallid Sturgeon Population Assessment Project, Project Management Plan, Volume 1.4. U.S. Army Corps of Engineers, Missouri River Recovery Program. 57 p. Dr. Tim Welker, Project Manager.

Oldenburg, E.W., T.P. Hanrahan, R.A. Harnish, B.J. Bellgraph, J.P. Duncan, and C.H. Allwardt. 2008. 2005 Annual Synthesis Report, Pallid Sturgeon Population Assessment Project and Associated Fish Community Monitoring for the Missouri River. PNNL-17539. Pacific Northwest National Laboratory, Richland, WA. Project Assessment Report, submitted to U.S. Army Corps of Engineers, Missouri River Recovery Program. Dr. Tim Welker, Project Manager.

Oldenburg, E.W., T.P. Hanrahan, R.A. Harnish, B.J. Bellgraph, J.P. Duncan, and C.H. Allwardt. 2008. 2006 Annual Synthesis Report, Pallid Sturgeon Population Assessment Project and Associated Fish Community Monitoring for the Missouri River. PNNL-17583. Pacific Northwest National Laboratory, Richland, WA. Project Assessment Report, submitted to U.S. Army Corps of Engineers, Missouri River Recovery Program. Dr. Tim Welker, Project Manager.

Sterner, V., R. Bowman, B. Eder, S. Negus, G. Mestl, K. Whiteman, D. Garner, V. Travnichek, J. Schloesser, J. McMullen, and T. Hill. 2009. Missouri River Fish and Wildlife Mitigation Program: Fish Community Monitoring and Habitat Assessment of Off-Channel Mitigation Sites. Sections I-V. Project Completion Report, submitted to U.S. Army Corps of Engineers, Missouri River Recovery Program. Luke Wallace, Project Manager.

Segment Reports

(Annual Project Reports submitted to U.S. Army Corps of Engineers, Missouri River Recovery – Integrated Science Program. Dr. Tim Welker, Project Manager.)

Haddix, T., L. Holte, and J. Hunziker. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 1. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Montana Fish, Wildlife, and Parks, Fort Peck, MT. 41 p.

Haddix, T., L. Holte, and J. Hunziker. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 2. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Montana Fish, Wildlife, and Parks, Fort Peck, MT. 140 p.

Haddix, T., L. Holte, and J. Hunziker. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 3. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Montana Fish, Wildlife, and Parks, Fort Peck, MT. 140 p.

Wilson, R., E. Nelson, and Z. Sandness. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 4. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by U.S. Fish and Wildlife Service, Missouri River Fish and Wildlife Conservation Office, Bismarck, ND. 140 p.

Shuman, D., R. Klumb, and G. Wanner. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segments 5 and 6. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by U.S. Fish and Wildlife Service, Great Plains Fish and Wildlife Conservation Office, Pierre, SD. 132 p.

Stukel, S., J. Kral, and S. Labay. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 7. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by South Dakota Game, Fish, and Parks, Yankton, SD. 161 p.

Koch, J, and K. Steffensen. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 8. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Nebraska Game and Parks Commission, Lincoln, NE. 134 p.

- Steffensen, K., and J. Koch. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 9. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Nebraska Game and Parks Commission, Lincoln, NE. 142 p.
- Niswonger, D., P. Horner, M. Miller, V. Travnicek. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 10. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Missouri Department of Conservation, Chillicothe, MO. 188 p.
- Horner, P., D. Niswonger, M. Miller, V. Travnicek. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 11. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by Missouri Department of Conservation, Chillicothe, MO. 136 p.
- Plauck, A., P. Herman, W. Doyle, and T. Hill. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 13. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by U.S. Fish and Wildlife Service, Columbia National Fish and Wildlife Conservation Office, Columbia, MO. 156 p.
- Herman, P., A. Plauck, W. Doyle, and T. Hill. 2009. 2008 Annual Report – Pallid sturgeon and associated fish community monitoring for the Missouri River: Segment 14. Prepared for the U.S. Army Corps of Engineers—Missouri River Recovery Program by U.S. Fish and Wildlife Service, Columbia National Fish and Wildlife Conservation Office, Columbia, MO. 160 p.
- Hall, J. R. and S. J. Sampson. 2009. Pallid Sturgeon Habitat Assessment and Monitoring Program 2008 Annual Report. Nebraska Game and Parks Commission, Lincoln, NE. 269 p.
- Wrasse, C., A. Starostka, C. Ridenour, W. Doyle, and T. Hill. 2009. 2008 Annual Report, Missouri River Habitat Assessment and Monitoring Program: Segments 10, 13, and 14. United States Fish and Wildlife Service, Columbia National Fish and Wildlife Conservation Office, Columbia, MO. 304 p.

Research Findings

- Bryan, J. L., M. L. Wildhaber, D. Gladish, S. Holan, M. Ellerseick. 2009. The power to detect trends in Missouri River fish populations within the Pallid Sturgeon Population Assessment Program. Final report submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. 419 p. Dr. Tim Welker, Project Manager.
- Delonay, A. et al. 2009. Ecological Requirements for Pallid Sturgeon Reproduction and Recruitment in the Lower Missouri River: A Research Synthesis 2005-2008. U.S. Geological Survey, Columbia Environmental Research Center, Columbia MO. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. Craig Fleming, Project Manager.

- Hedrick et al. 2009. Development of Management Tools for the Pallid Sturgeon Iridovirus. University of California, Berkeley CA. Project Completion Report, submitted to U.S. Army Corps of Engineers, Missouri River Recovery Program. Dr. Tim Welker, Project Manager.
- Reuter, J.M., Jacobson, R.B., Elliott, C.M., and DeLonay, A.J.. 2009. Assessment of Lower Missouri River physical aquatic habitat and its use by adult sturgeon (genus *Scaphirhynchus*), 2005–07: U.S. Geological Survey Scientific Investigations Report 2009–5121, 81 p.
- Reuter, J.M., Jacobson, R.B., Elliott, C.M., Johnson, H.E., III, and DeLonay, A.J. 2008. Hydraulic and substrate maps of reaches used by sturgeon (genus *Scaphirhynchus*) in the Lower Missouri River, 2005–07: U.S. Geological Survey Data Series 386, 442 p.
- Jacobson, R.B., Johnson, H.E., III, and Dietsch, B.J. 2009. Hydrodynamic simulations of physical aquatic habitat availability for pallid sturgeon in the Lower Missouri River, at Yankton, South Dakota, Kenslers Bend, Nebraska, Little Sioux, Iowa, and Miami, Missouri, 2006–07: U.S. Geological Survey, Scientific Investigations Report 2009–5058, 67 p.

[Least Tern and Piping Plover](#)

- Pavelka G. 2009. Annual Accountability Report for 2008 Activities in Support of Missouri River Interagency Species Memorandum of Agreement, Eileen Dowd Stuckel-Editor, South Dakota Department of Game, Fish and Parks Pierre SD Wildlife Division Report No. 2009-06, June 2009.
- Pavelka G. 2009. 1995-2008 Least Tern and Piping Plover Nesting, Productivity and Adult Census Spatial Data, Missouri River Recovery Least Tern and Piping Plover Data Management System, <https://rsgis.crrel.usace.army.mil/intro/dms.dmsintro.main>.

Annual Progress Reports

- Joy H. Felio, Daniel H. Catlin and James D. Fraser 2008. Evaluating piping plover population dynamics and engineered sandbar habitat: Field Operations Report 2008. Virginia State University, Blacksburg VA. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. Coral Huber, Project Manager.
- Mark H. Sherfy, Michael J. Anteau, Terry L. Shaffer, Marsha A. Sovada, Laurence L. Strong, and Jennifer H. Stucker. 2009. Research, Monitoring, and Assessment Program for Least Tern and Piping Plover Habitat and Productivity on the Missouri River: 2008 Progress Report. U.S. Geological Survey, Northern Prairie Wildlife Research Center, Jamestown ND. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. Coral Huber, Project Manager.

Research Findings

Le Fer D., Fraser J., Kruse C. 2008. Piping Plover Chick Foraging Survival in the Great Plains, *Journal of Wildlife Management*, Vol. 72, No. 3, p. 682-687.

Martin, B., Gagnon, P., Aron, C., Dood, A., Huber, C., McPhillips, E., Pavelka, G., Renkin, R., Skold, J. 2009. Missouri River Basin Least Tern and Piping Plover Research Development and Prioritization - *Draft Report in Review*. The Nature Conservancy. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. Coral Huber, Project Manager.

Catlin, D.H. 2009. Population Dynamics of Piping Plovers (*Charadrius melodus*) on the Missouri River, PhD. Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University, Blacksburg VA.

McGowan C., Millspaugh J., Ryan M., Kruse C., Pavelka G. 2009. Estimating Survival of Precocial Chicks during the Pre-fledging Period using a Catch-Curve Analysis and Count Based Age Class Data, *Journal of Field Ornithology*. Vol. 80, No. 1, p. 79-87.

Le Fer D., Fraser J., Kruse C. 2008. Piping Plover Chick Foraging Survival in the Great Plains, *Journal of Wildlife Management*, Vol. 72, No. 3, p. 682-687.

Flow Modifications

U.S. Army Corps of Engineers. 2008. 2008 Spring Pulse and Rises Drainage Monitoring and Evaluation: Missouri River Recovery, Integrated Science Program Report, 153 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. 2008. 2008 Groundwater Monitoring and Evaluation Report: Missouri River Recovery, Integrated Science Program Report, 10 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. 2008. Summary of 2008 Spring Pulse Releases and Lower River Conditions: Missouri River Recovery, Integrated Science Program Report, 14 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. 2009. Relationship between the Spring Pulses and Fort Randall and Gavins Point Reservoir Level Changes and Potential Cultural Resource Effects: Missouri River Recovery, Integrated Science Program Report, 7 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. 2009. March Created Spring Rise on the Lower Missouri River - *In Review*: Missouri River Recovery, Integrated Science Program Report, 14 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. 2009. May Created Spring Rise on the Lower Missouri River - *In Review*: Missouri River Recovery, Integrated Science Program Report, 24 p. Roy McAllister, Project Manager.

U.S. Army Corps of Engineers. June 2009. Fort Peck Temperature Control Device Reconnaissance Study, Fort Peck, Montana. 58 p. John Palensky, Project Manager.

Elliott, C.M., Reuter, J. R., and Jacobson, R.B. 2009. Channel morphodynamics in four reaches of the Lower Missouri River, 2006–07: U.S. Geological Survey Scientific Investigations Report 2009–5074, 258 p.

Adaptive Management

Fleming, C., et al. 2009 in draft. Emergent Sandbar Habitat Adaptive Management Plan – *In Review*: Missouri River Recovery, Integrated Science Program Report, 33 p. Craig Fleming, Project Manager.

Thom, R., Tyre, A. Anderson, M., Hiller, T., Fleming, C. 2009 in draft. Adaptive Management Framework for the Missouri Recovery River Program – *In Review*: Missouri River Recovery, Integrated Science Program Report, 25 p. Craig Fleming, Project Manager.

Cottonwoods

Annual Progress Reports

Dixon, M. D., W.C. Johnson, M.L. Scott, and D. Bowen. 2009. 2008 Annual Report – Missouri River Cottonwood Study. University of South Dakota, Vermillion SD. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery Program. 74 p. Lisa Rabbe, Project Manager.

Research Findings

Dixon, M. D. 2008. Historic Land Cover Changes on Missouri River Segment 10 – Initial Findings (Draft Report). University of South Dakota, Vermillion SD. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery – Integrated Science Program. 16 p. Lisa Rabbe, Project Manager.

Dixon, M. D. 2008. Summary of Data on Pre-settlement Forest Composition on Segment 10 (Draft Report). University of South Dakota, Vermillion SD. Submitted to the U.S. Army Corps of Engineers, Missouri River Recovery – Integrated Science Program. 4 p. Lisa Rabbe, Project Manager.