



# Environmental Contaminants Program

## *Chesapeake Bay Field Office*

### Reports and Publications 2003 -2008

#### Reports

McGee, B.L., A.E. Pinkney, D.J. Fisher and L.T., Yonkos. 2003. Evaluation of endocrine disrupting effects in Potomac River fish. CBFO-C03-01.

Eaton-Poole, L. and A.E. Pinkney. 2003. Investigation of abnormalities in frogs on Region 5 National Wildlife Refuges: 2002 year-end report. FY03-NEFO-1-EC and CBFO-C03-02.

McGee, B.L., L.T. Yonkos, J.D. Petty, D.J. Fisher, D.A. Alvarez, T. May, W. Cranor, and J. Huckins. 2003. Evaluating the potential water quality impacts of Animal Feeding Operations on National Wildlife Refuges on the Delmarva Peninsula. CBFO-C03-03

Pinkney, A.E. 2003. Investigation of fish contaminant concentrations at Painted Turtle Pond, Occoquan Bay National Wildlife Refuge, Woodbridge, VA. CBFO-C03-05

Pinkney, A.E., P. Doelling Brown, B.L. McGee, and H.L. Phelps. 2003. Assessing the bioavailability of organic contaminants in the Anacostia River using semi-permeable membrane devices and filter-feeding clams. CBFO-C03-06.

Pinkney, A.E., P. Doelling Brown, B.L. McGee, K.N. Johnson, and D.J. Fisher. 2003. Contaminant monitoring in the Kingman Lake Restored Wetland, Washington, DC. CBFO-C03-07

Guy, C.P., M. Huston, S. Krest, and D. Murphy. 2004. Ecological Risk Assessment for the Prime Hook Lead Pellet Site. CBFO-C03-04.

Pinkney, A.E., P.C. McGowan, and D.J. Fisher. 2004. Chemical, toxicological, and ecological assessment of two tributaries at Patuxent River Naval Air Station, Patuxent River, MD. CBFO-C04-01.

Eaton-Poole, L., A.E. Pinkney, and S. Krest. 2004. Investigation of abnormalities in frogs on Region 5 National Wildlife Refuges: 2003 year-end report. RY2004-NEFO-EC-1 and CBFO-C04-02.

Pinkney, A.E., J.C. Harshbarger, and M.R. Roberts. 2004. Tumor Prevalence in brown bullheads from Darby Creek, John Heinz NWR Philadelphia, PA. CBFO-C04-03 and PAFO-C04-02.

Pinkney, A.E. and J.C. Harshbarger. 2004. Evaluation of tumor prevalence in mummichogs (*Fundulus heteroclitus*) from the Delaware Estuary watershed. CBFO-C04-04.

Huston, M, and S. Krest. 2004. Ecological Risk Assessment for Range 17 (Trap and Skeet Range) Patuxent Research Refuge, Laurel, MD. U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD and U.S. Environmental Protection Agency, Edison, NJ.

Pinkney, A.E., B.L. McGee, P.C. McGowan, D.J. Fisher, J. Ashley, and D. Velinsky. 2005. Using the Sediment Triad to characterize toxic conditions in the Chesapeake Bay (2002): An assessment of tidal river segments in the Bohemia, Elk, Northeast, and Severn Rivers. CBFO-C05-01.

Pinkney, A.E., S.K. Krest, L. Eaton-Poole, and D.R. Sutherland. 2005. Investigation of abnormalities in frogs on Region 5 National Wildlife Refuges: 2004 year-end report. RY2005-NEFO-EC-1 and CBFO-C05-03.

Pinkney, A.E. and J.C. Harshbarger. 2005. Tumor prevalence in brown bullheads (*Ameiurus nebulosus*) from the South River, Anne Arundel County, Maryland. CBFO-C05-04.

Pinkney, A.E., P.C. McGowan, and D.J. Fisher. 2006. Risk-based monitoring of the Kingman Lake Restored Wetland, Washington, DC. CBFO-C05-02.

Guderyahn, L. 2006. Nationwide assessment of morphological abnormalities observed in amphibians collected from United States National Wildlife Refuges. CBFO-C0601.

**Pinkney, A.E.**, L. Eaton-Poole, E.M. LaFiandra, K.J. Babbitt, C.M. Bridges Britton, E.E. Little, and W.L. Cranor. 2006. Investigation of contaminant effects on frog development at Great Bay National Wildlife Refuge, Newington, New Hampshire. CBFO-C0602 and RY2006-NEFO-EC-01.

**Pinkney, A.E.** and **P.C. McGowan**. 2006. Evaluation of chemical, toxicological, and ecological data for the Tidal Middle Branch of the Patapsco River, Baltimore, Maryland. CBFO-C06-04

**Pinkney, A.E.**, **S. K. Krest**, and K.L. Munney. 2006. Investigation of abnormalities in frogs on Region 5 National Wildlife Refuges: 2005 year-end report. CBFO-C06-05 and RY2006-NEFO-EC-1

**Pinkney, A.E.**, **S. K. Krest**, and K.L. Munney. 2007. Investigation of abnormalities in frogs on Region 5 National Wildlife Refuges: 2006 year-end report. RY2007-NEFO-EC-1 & CBFO-C07-01.

**Pinkney, A.E.**, S.A. Smith, J. Leisenring, and C. Wickliffe. 2007. Investigation of abnormalities in frogs on the Eastern Shore of Maryland. CBFO-C0603.

**Pinkney, A.E.** and J.C. Harshbarger. 2008. Tumor prevalence in brown bullheads (*Ameiurus nebulosus*) from the Little Blackwater River, Maryland. CBFO-C08-01.

#### **Journal Articles and Book Chapters**

Eaton-Poole, L., **A.E. Pinkney**, D.E. Green, **D.R. Sutherland**, and K.J. Babbitt. 2003. Investigation of frog abnormalities on National Wildlife Refuges in the Northeast U.S. In: Multiple Stressor Effects in Relation to Declining Amphibian Populations, ASTM STP 1143, G. Linder, **S. Krest**, and D. Sparling, Eds., American Society for Testing and Materials, West Conshohocken, PA. pp. 63-78

Golden, N.H., B. A. Rattner, **P. C. McGowan**, K. C. Parsons, and M. A. Ottinger. 2003. Concentrations of metals in feathers and blood of nestling black-crowned night-herons (*Nycticorax nycticorax*) in Chesapeake and Delaware Bays. Bull. Environ. Contam. Toxicol. 70:385-393.

**Krest, S.K.**, G. Linder and D.W. Sparling. 2003. Multiple stressor causes of declining amphibian populations: A Wingspread Workshop summary. Multiple Stressor Effects in Relation to Declining Amphibian Populations, ASTM STP 1443, G. Linder, **S. Krest**, and D. Sparling, Eds., ASTM International, West Conshohocken, PA, pp. 207-219.

Sparling, D.W, **S.K. Krest**, and G. Linder. 2003. Multiple stressors and declining amphibian populations: An integrated analysis of cause-effect to support adaptive resource management. In: Amphibian Decline: An Integrated Analysis of Multiple Stressor Effects. G. Linder, **S.K. Krest**, and D.W Sparling, Editors, SETAC Press, Pensacola, FL. pp. 1-7.

**Krest, S.K.**, D. Shank, G. Linder, and D.W. Sparling. 2003. Epilogue: Scientific direction, recommendations, and habitat restoration. Amphibian Decline: An Integrated Analysis of Multiple Stressors. Greg Linder, Sherry K. Krest, and Donald W. Sparling (editors). SETAC Press, Pensacola FL, pp. 315-325.

Turley, S.T., L. Eaton-Poole, **A.E. Pinkney**, M.A. Osborn, and D.T. Burton. 2003. Evaluation of the potential impact of water and sediment from National Wildlife Refuge sites using a modified Frog Embryo Teratogenesis Assay-Xenopus. In: Multiple Stressor Effects in Relation to Declining Amphibian Populations, ASTM STP 1143, G. Linder, **S. Krest**, and D. Sparling Eds., American Society for Testing and Materials, West Conshohocken, PA. pp. 79-95

Chu, S., C.-S. Hong, B.A. Rattner, and **P.C. McGowan**. 2003. Methodological refinements in the determination of 146 polychlorinated biphenyls (PCBs), including non-ortho and mono-ortho substituted PCBs, and 26 organochlorine pesticides as demonstrated in heron eggs. Analyt. Chem. 75:1058-1066.

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- Rattner, B.A., **P.C. McGowan**, N. H. Golden, J. S. Hatfield, P.C. Toschik, R. F. Lukei Jr., R. C. Hale, I. Schmitz-Afonso, and C. P. Rice. 2004. Contaminant exposure and reproductive success of ospreys (*Pandion haliaetus*) nesting in Chesapeake Bay Regions of Concern. *Arch. Environ. Contam. Toxicol.* 47:126-140.
- Sakaris, P.C., R.V. Jesien, and **A.E. Pinkney**. 2005. Brown bullhead, *Ameiurus nebulosus*, as an indicator species: seasonal movement patterns and home ranges within the Anacostia River, Washington, D.C. *Trans. Amer. Fish. Soc.* 134:1262-1270.
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- Guy, C.P., A.E. Pinkney**, and M.H. Taylor. 2006. Effects of sediment-bound zinc contamination on early life stages of the mummichog (*Fundulus heteroclitus* L.) in the Christina Watershed, Delaware, USA. *Environ. Toxicol. Chem.* 25:1305-1311.
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- Sparling, D.W., **S. Krest**, and M. Ortiz-Santaliestra. 2006. Effects of lead-contaminated sediment on *Rana sphenoccephala* tadpoles. *Arch. Environ. Contam. Toxicol* 51:458-466.
- Pinkney, A.E.** and **P.C. McGowan**. 2006. Use of the p,p'-DDD:p,p'-DDE concentration ratio to trace contaminant migration from a hazardous waste site. *Environ. Monit. Assess.* 120:559-574.
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- Rattner, B.A. and **P.C. McGowan**. 2008. Potential hazards of environmental contaminants to avifauna residing in the Chesapeake Bay estuary. In: *Waterbirds of the Chesapeake Bay and Vicinity: Harbingers of Change*, R.M. Erwin, B.D. Watts, G.M. Haramis, M.C. Perry and K.A. Hobson Eds., The Waterbird Society, Special Publication pp. 63-81.
- Rattner, B.A., N.H Golden, P.C. Toschick, and **P.C. McGowan**. 2008. Concentrations of metals in blood and feathers of nestling ospreys (*Pandion haliaetus*) in Chesapeake and Delaware Bays. *Arch Environ Contam Toxicol* 54:114-122





