

10 Facts about Fishing Lures and Water Quality

- 1) Fishing is the most popular form of outdoor recreation in the U.S.: 40 million anglers of all ages and demographics; more participants than golf and tennis combined; \$40 Billion spent annually in the U.S. for fishing and related expenses. (U.S. Fish & Wildlife Service).
- 2) A sea of plastic fishing lures: \$2 Billion annual U.S. retail market for fishing lures and bait, of which approximately \$300 million is for soft plastic fishing lures. (USF&W). An average retail price of \$3/bag equates to 100 million bags of soft plastic fishing lures sold annually.
- 3) Soft plastic fishing lures typically are made from polyvinyl chloride (PVC) plastisol. This includes (a) PVC resin, (b) chemicals called "phthalates" that soften PVC and (c) stabilizers. Phthalates leach out because they do not chemically bind to the PVC resin. Published patents reveal that soft plastic fishing lures typically are 50%-70% phthalates. (uspto.gov).
- 4) Phthalates are considered reproductive toxins that have been linked to health problems such as (a) abnormal development of the reproductive system in boys; (b) deteriorated sperm quality in men; and (c) premature puberty in girls. See Swann, et al., "Decrease in Anogenital Distance among Male Infants with Prenatal Phthalate Exposure," *Environmental Health Perspectives*, August 2005, Vol. 113, No. 8; Hoppin, "Male Reproductive Effects of Phthalates: An Emerging Picture," *Epidemiology*, May 2003, Vol. 14, No. 3. The U.S. Centers for Disease Control says phthalates mimic estrogen and "get rid of things that are in the testosterone line, the things that make a man a man." *USA Today*, August 2, 2005.
- 5) The EPA lists some phthalates as hazardous substances. Three states (CA, WA, VT) have banned phthalates above trace amounts in children's products; at least eight other states and the U.S. Congress are considering similar legislation.
- 6) Several leading mass market retailers have pledged to phase-out or reduce PVC in packaging and certain products, but not PVC fishing lures. Ironically, soft plastic fishing lures are the only PVC products that by design are thrown directly into and lost in our water resources.
- 7) At an average of 3 to 4 ounces per bag, there are 20 million pounds of PVC fishing lures thrown into surface waters every year. Most lures are lost or discarded in or around the water. Ingestion by fish and other wildlife leads to malnourishment or death. See Dr. Russell Danner (Maine Department of Inland Fisheries & Wildlife), et al., 2007, "Effects of Plastic Fishing Lures on Brook Trout Growth" (publication pending, copy available upon request).
- 8) Based on usage rates, roughly 10 million pounds of phthalates are deposited into the environment annually due to soft plastic fishing lures. This is over 1.2 million gallons of phthalates – enough to fill 160 tanker trucks – every year.
- 9) The U.S. Geological Survey (usgs.gov) found phthalates to be the most prominent contaminant in ground and surface waters. Stile, et al., "Measurement of Drinking Water Contaminants by Solid Phase Microextraction Initially Quantified in Source Water Samples by the USGS," *Environmental Science & Technology*, 2008, Vol. 42, No. 8, pp. 2976-2981.
- 10) Competitively-priced alternatives to soft plastic fishing lures are readily available, including some made entirely of edible, FDA-approved food ingredients instead of synthetic polymers.