

New Activity in 2009 of the AFS Bioengineering Emerging Technology Committee

Because requests for reviews of new technologies have been few, the Committee in 2009 began an effort to re-define its mission to be more aggressive in encouraging and stimulating innovation in fish passage and protection. To accomplish this, the Committee has initiated three efforts:

1. Planning to publish in *Fisheries* a two-part article on “Guidelines for Fish Protection Technology Evaluation”. Originally developed in 2001, these guidelines have not been released outside the Section. This action will put the guidelines into the public domain.
2. Organized a symposium on **Promoting Innovation in Fish Passage & Protection**. This symposium will be held at the AFS Annual Meeting in Nashville, TN (see symposia page). This symposium will serve as a benchmark for establishing the current ‘state of the art’ in fish passage and protection, but more importantly to set the stage for future progress, with each author being tasked to identify areas in need of improvement and identifying research needs and solutions for these problems. Unlike other symposia, where authors present their own findings, this symposium will be a series of review papers with the aim of presenting a holistic perspective of the field. Careful attention will be paid to fundamental physical and biological principles, and the symposium will conclude with a series of talks focusing on basic research and what the fields of biomechanics, physiology, and behavior can offer to the bioengineering community. In support of this last goal, The Leverhulme Network (an international fellowship of scientists studying fish responses to hydraulic phenomena) will co-sponsor, attend, and contribute to this symposium. These topics are of sufficient breadth, depth, and applied importance to be of significant interest to a broad sector of the AFS membership.
3. Preparing a technical paper for publishing the “state-of-knowledge and development needs to improve fish passage and protection. Of the Committee’s new initiatives, this is the least organized at this time. This technical paper would be published in *Fisheries* and could be a condensed summary of the Nashville symposium noted above.

For additional information on this committee, contact Ted Castro-Santos, current BES President at tcastro_santos@usgs.gov or Lynn Reese, Committee Chair at Lynn.A.Reese@usace.army.mil.