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# Deep-Sea Fishes of the Mid-Atlantic Ridge: Results of the 2009 Henry Bigelow Expedition

Tracey Sutton
Virginia Institute of Marine Science, tsutton1@nova.edu

April B. Cook
Virginia Institute of Marine Science, acook1@nova.edu

John K. Galbraith Northeast Fisheries Science Center - Woods Hole

M. Vecchione

National Museum of National History, Smithsonian Institute, Washington DC

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#### 0508 Poster Session III, Exhibit Hall D, Sunday 11 July 2010

<u>Tracey Sutton</u><sup>1</sup>, April Cook<sup>1</sup>, John Galbraith<sup>2</sup>, Michael Vecchione<sup>3</sup>

<sup>1</sup>Virginia Institute of Marine Science, The College of William & Mary, Gloucester Point, VA, United States, <sup>2</sup>NOAA Fisheries Northeast Fisheries Science Center, Woods Hole, MA, United States, <sup>3</sup>NOAA Fisheries National Systematics Lab, Washington, DC, United States

## Deep-Sea Fishes of the Mid-Atlantic Ridge: Results of the 2009 *Henry Bigelow* Expedition

As part of an ongoing study of the northern Mid-Atlantic Ridge biodiversity and ecology (CoML field project MAR-ECO), a detailed survey of the pelagic and demersal fishes in the region of the Charlie-Gibbs Fracture Zone (~ 600 n.m. south of Greenland) was conducted. A total of 17181 pelagic fishes (92 spp., 35 families) were sampled from 0-3000+ m, with the Myctophidae the most species-rich. The bristlemouth Cyclothone microdon was by far the dominant species in numbers (82% of total), while the sawtooth eel Serrivomer beani dominated biomass (27%). A total of 441 deep-demersal fishes (28 spp., 13 families) were sampled from 1872-3527 m, with the Macrouridae and Alepocephalidae comprising half of species numbers. The abyssal halosaur *Halosauropsis* macrochir was most abundant, while the abyssal grenadier Coryphaenoides armatus contributed the most biomass. Remarkable among the pelagic fish data were routine shallow catches of bathypelagic fishes (see A.B. Cook et al., this volume), and among the demersal fishes were the large size of the individuals, above or near the maximum known for many species. The high species number relative to sample number portends the enhanced deep-sea biodiversity about abrupt topographic features, while the lack of asymptote of species number versus sampling effort underscores our incomplete inventory of this biodiversity.

### 0579 Fish Ecology, Morphology & Physiology, 556 AB, Saturday 10 July 2010

Christopher Sweetman, Tracey Sutton

Virginia Institute of Marine Science, Gloucester Point, Virginia, United States

## Distribution and Trophic Ecology of *Bathylagus euryops* (Teleostei: Microstomatidae) along the Northern Mid-Atlantic Ridge

The assemblage structure and ecology of meso- and bathypelagic fishes are poorly known in general, particularly over mid-ocean ridges. In June 2004, the month-long MAR-ECO (Census of Marine Life) research expedition aboard the R/V G.O. Sars sampled the deep-pelagic fauna over the northern Mid-Atlantic Ridge with the objective of quantitatively assessing the nekton associated with the ridge from Iceland to the