



The Heat is On: Beautiful, but Warmer

Professor Michael Axelsson,
Zoophysiology, Gothenburg University,
Sweden

We studied cardiac scope of three different sculpin species to acute temperature changes from 1-10°C at the Copenhagen Arctic station at Disko Island in 2002. Two of the Arctic species showed a peak performance around 4°C, while the short horned sculpin performed better at 7 and 10°C. This indicates a potential vulnerability of the Arctic species to increased water temperature, while the geographically more widespread short horned sculpin is more tolerant. When we returned to Greenland in 2009, the water temperature had increased from 6 to 9°C compared to 2002 and we discovered a marked rise in routine cardiac output, heart rate and stroke volume in the short horned sculpin at 9°C compared to results obtained in 2002. I will also discuss interesting differences in cardiac scope measurements between 2002 and 2009.



Monday March 14th at 11.15 at Zoophysiology