



Great Lakes WATER Institute

Wisconsin Aquatic Technology and Environmental Research



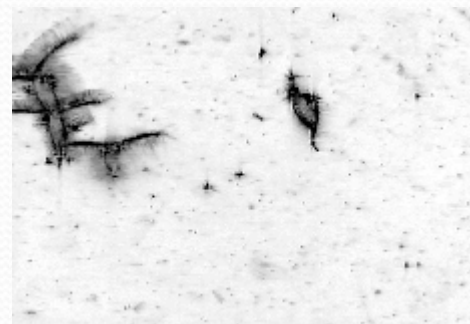
FUNCTIONAL ECOLOGY OF CALANOID COPEPODS

J. Rudi Strickler

STRUCTURE OF FEEDING CURRENT



Using special optical systems allowed us to observe free-swimming copepods feeding on suspended algae. We made these observations with video at 30 frames per second. Frame by frame analyses and image processing rendered two figures: an animated GIF file, and a graph of the paths of suspended particles as seen from the animal's point of view. The comparison with results from Computational Fluid Dynamics is astonishing



In the drawing on the left the positions of the suspended particles with respect to the moving animal were determined frame by frame. Algae within the red zone will pass through the capture area and may be captured