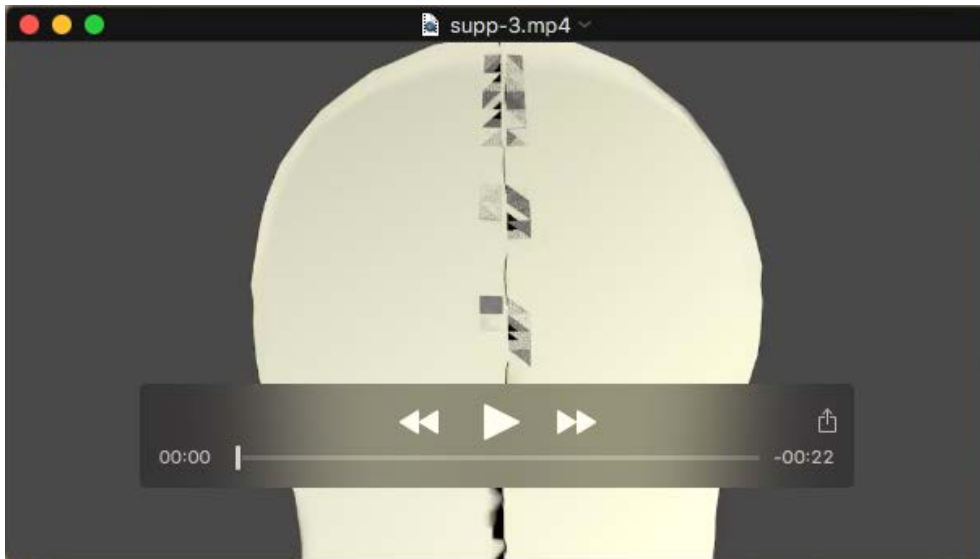


Figure S1. Assembly of radular surface and radular sac. A. Initial position of radular surface; radular sac is beneath it. B. - D. Process of folding radular surface. E. Radular sac is moved upwards into the base of the radular stalk.



Movie 1 (LSRFTri.ogg): Assembly of model, and then three successive bites in which the lateral sub-radular fibers are activated, showing the normal pattern of biting, including large openings near the peak of protraction, followed by ridge formation and retraction.



Movie 2 (LSRFLesionTri.ogg): Assembly of model, and then three successive bites in which the lateral sub-radular fibers are not activated. Opening is much smaller, and ridge formation is weaker.



Movie 3 (LSRFInverseTri.ogg): Assembly of model, and then three successive bites in which the lateral sub-radular fibers are activated at times that are passive in intact animals. The three bites are severely disrupted.