WDFW and UW Brown Bag Seminar Series Presents:

Food web impacts of geoduck clam aquaculture practices in Puget Sound, Washington

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Room 175 A&B

Natural Resources Building, Olympia

Abstract.-- Aquaculture operations are a frequent and prominent cause of anthropogenic disturbance to marine and estuarine communities. In Puget Sound, Washington, aquaculture of the Pacific geoduck clam (*Panopea generosa*) is on the rise, however little is currently known about impacts of the industry on ecological communities. The study took place during the initial, structured phase of intertidal geoduck aquaculture, when nets and PVC tubes were in place to protect immature geoducks from predators. The food web of a local ubiquitous consumer, Pacific staghorn sculpin (*Leptocottus armatus*), was compared between geoduck aquaculture sites and nearby reference areas without aquaculture. Data will be presented from a variety of research techniques, including stable isotope analysis and bioenergetics modeling, and discussion will focus on the ecological impacts of geoduck aquaculture at its current scale. Overall, the results showed that the structured phase of geoduck aquaculture initiated some changes to staghorn sculpin ecology, but the overall function of sculpin within the food web remained unchanged.