

1056-BA-1714 **Roland H. Lamberson*** (rh11@humboldt.edu). *Endangered Salmon in the Columbia River Basin.*

At the time of Lewis and Clark, about 15 million salmon were returning to spawn in the Columbia Basin each year. Current returns are about one million with most of those resulting from artificial hatchery production. Of the more than 200 salmon stocks existent in the 19th century, it is thought that more than 140 are now extinct or at risk of extinction and only nine are considered healthy. Each year over 200 million salmon and steel head juveniles are released from hatcheries. These hatchery fish compete with the endangered wild salmon and steel head populations. In this presentation, I will give an overview of the COMPASS Model, the major model used to study salmon dynamics in the Columbia River System and then look at a more specialized model to examine the competition between hatchery fish and wild fish and use it to demonstrate some of the problems in recovering the wild populations. (Received September 22, 2009)