

The cycle begins when the eggs hatch and start producing waste. To introduce the beneficial bacteria, as the eggs hatch we start adding BioZyme, a product that contains both Nitrosomonas and Nitrobacter bacteria. The ionized form, Ammonium ( $\text{NH}_4$ ), is present if the pH is below 7, and is not toxic to fish. The unionized form, Ammonia ( $\text{NH}_3$ ), is present if the pH is 7 or above, and is highly toxic to fish. Fortunately, just after hatching the alevins are producing very little waste. Their waste is quickly broken down into either ionized or unionized ammonia.