Estimating number of fish in scattering layer

Step 1: Here we have 5 *Cyclothone sp*, a small fish that is abundant in our net tows. We measure their length. Then we add that information into computer models to figure out how big their echoes are.

Step 2: We've added two different fluids (one heavier, one lighter) together until the fish start to float. Then we know the density of the fish. Even though the fish look alike, they can have different densities depending on what they've been eating, how old they are, or whether they are reproducing.

We use this information with our acoustic measurements and estimate how many fish are in the scattering layers!

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