

During the spring of 2016, Delaware State University’s Center for Small Flock Research and Innovation worked with a poultry entrepreneur in the Mid-Atlantic region to gather data on a new product. The study was aimed at comparing the drip loss associated with two types of nipple drinkers (Brite-Tap® and traditional hanging nipples), a side nipple drinker, and a traditional open water trough system.

The traditional hanging nipple drinker placed 4 nipples into the bottom of a 5 gallon bucket and suspended the bucket by chains in the pen to allow for the height to be adjusted as the birds grew. The Brite-Tap® waterer was placed into a 20 gallon insulated cooler. The height of the cooler was adjusted upward as the chicks grew by placing it on cinder blocks. The open water trough was also raised as the chicks grew by placing cinder blocks underneath the waterer. The side nipple drinker placed 4 nipples on the sides of a 5 gallon bucket approximately 2 inches above the bottom of the bucket. Nipples were placed on opposite sides of the bucket with 2 per side approximately 4 inches apart. The height of the side nipple drinker was also raised as chicks grew by putting cinder blocks underneath.

When the trial began chicks were started using quail drinkers, then chick waters, and then the individual pen waterers were introduced on day 5. An adjustment period of 2 days was given to allow chicks to find the new waterers before the chick waterers were completely removed. All chicks found the new waterers in that period of time.

Drip loss from each type of waterer was determined by placing a wire covered drip tray beneath each waterer to capture drip loss. Drip loss was measured daily. The drip tray was wiped clean before being returned to each pen.

The study took place from weeks 2-6 of the trial. The remainder of the trial proved more challenging. As the chickens grew, they knocked an ever increasing number of shavings into the drip pan. Additionally, as the birds aged, they were able to move the drip pan away from the waterer. This confounded the results for later in the trial.

The results of the drip loss trial are presented in a series of charts that follow. The charts all represent the same data, however, the units have been changed to represent different forms of measurement. It is understood that readers may think more in terms of gallons, cups or quarts, rather than milliliters.







