

DESPITE RECENT RAINS, DROUGHT WARNING STILL IN EFFECT, WATER CONSERVATION URGED

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Recent rains have brought welcome short-term relief from this summer's drought, but the drought warning declared by the Susquehanna River Basin Commission on September 14 remains in effect.

According to Paul Swartz, SRBC's executive director, the purpose of the drought warning is to alert people that we are approaching critical water levels and to call for voluntary water conservation measures basinwide.

The declaration follows action taken in August to impose drought management measures on six facilities located in portions of the basin reaching critical water flow levels. The SRBC notified those companies to be on standby for automatic water use restrictions if the river fell below the critical stage.

The warning was declared since a number of indicators point to serious groundwater and in-stream flow deficits. Groundwater levels are below normal in most of the basin, especially in Bradford and Cumberland counties. Most wells are at levels reached only once every five or 10 years.

Water flows are one-third the normal levels across the basin. At the end of August, the flow in the Susquehanna River at Harrisburg was 3,700 cubic feet per second (cfs) instead of the normal 8,599 cfs. Rainfall on Sept. 17, combined with water releases from upstream reservoirs, raised the flow levels to 4,000 cfs, still less than half the normal flow.

Within three days the flows had returned to near August lows. The flow at Waverly, N.Y. in August was 235 cfs instead of the normal flow of 1,373 cfs.

The Susquehanna River Basin Commission was formed in 1971 to regulate water use in the Susquehanna River Basin. Four commissioners oversee the operations of the SRBC. One commissioner each is appointed by the states of Maryland, New York, and Pennsylvania and a fourth commissioner is appointed by the federal government.

The goal of the SRBC is to man-

age the water supply to insure all users have access to the water they need and to insure a minimum level of flow in the rivers and streams in the basin. The SRBC is especially concerned about consumptive uses of water where water is consumed in an activity and no longer available to be returned to the water supply in the basin.

Agricultural consumptive uses include irrigation and consumption by livestock. Currently the consumptive use regulations are suspended for agriculture while the SRBC determines how to apply the regulations to agriculture in an equitable manner.

The drought warning is a good reminder that water conservation should be a normal part of the management on our farms. Our water supply, while generally adequate in the Northeast, is subject to periodic shortages such as the one we are now experiencing. At the same time, the demand for water in society in general is continuing to grow. Therefore, it is important that each poultry producer develop

a water conservation plan.

The first step in your plan should be to check your watering equipment regularly. Make sure that your cup founts are not overflowing and that nipple founts are not dripping. Check to see that your pressure reducing valves are set properly and that line filters are clean and free of particles.

A second area of potential water savings on the poultry farm is in the operation of misting systems for evaporative cooling during the hot periods of the summer. Water use can be reduced by reducing the time period the system is operated and by using low flow nozzles. One can also reduce the number of nozzles per building and restrict the use of the system to times when the temperature is above 85 degrees.

One can also conserve high quality water by misting with water not suitable for drinking such as water with high nitrate levels. Using air for cooling is another option to evaluate when developing your water conservation plan.

It is important to remember when adjusting your cooling system that water consumption by

poultry goes up with temperature increase. Simply allowing your temperature in the house to rise will increase water consumption by the flock.

Allowing the temperature to rise will only save water if the water saved in the misting system is greater than the increase in water consumption by the flock. For example, at 60 degrees, 100 layers will consume 5.2 gallons per day, at 70 degrees they consume 5.3 gallons, at 80 degrees they consume 6.7 gallons, at 90 degrees they consume 10.9 gallons, and at 100 degrees they consume 15.4 gallons.

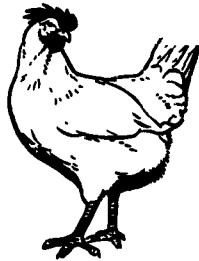
Also remember that additional water is the key to the birds' ability to maintain proper body temperature as external temperatures rise. Never attempt to conserve water by reducing drinking water availability.

An important part of your water

needs of 100,000 layers for one day. Obviously one could not resort to that option for very long.

An important part of emergency preparedness is to explore new supply options. One could consult with a hydrogeologist to do fracture trace mapping to locate high potential well sites before the need is at hand.

The issue of periodic constraints on our water supply is a fact of life in our society with a growing population. Therefore, continuing to update one's water conservation plan is simply a part of good management on a poultry farm.



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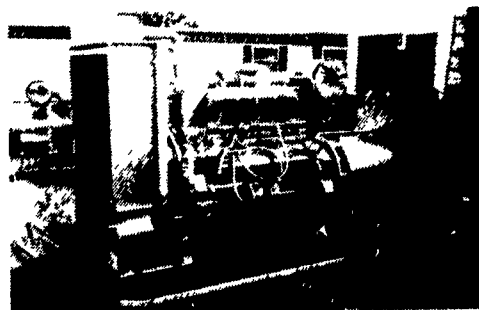


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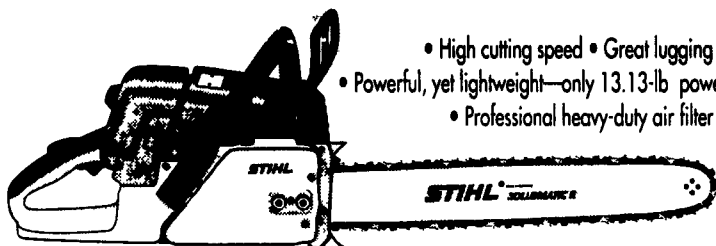
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