

Drinking Water Temperature for Lactating Sows

A big focus in sow production units is maximizing feed intake of lactating sows. The benefits of this practice have been well documented and include: Increased litter weight gain, reduced sow weight loss, improved wean-to-service intervals and conception rates, and higher numbers of pigs born in subsequent litters. We do not normally focus on the water offered to sows, other than checking flow rate and quality. We know water intake is critical, and if sows do not consume enough water, milk output and piglet growth rates suffer. Most farrowing crates are fitted with nipple waterers, and we assume if waterers are positioned correctly, sows with access to water 24 hr/d must be drinking all they need. However, this is not necessarily true, according to research conducted at the University of Queensland, Australia.

In the Queensland summers, outside temperatures range between 84 and 110°F during the night and daytime, respectively. The temperature of drinking water for sows in the farrowing house rarely falls below 77°F and averages about 7°F below outside temperatures. Thus, researchers decided to examine the impact of drinking water temperature on water intake and resulting performance of lactating sows and their piglets (Table 1).

Researchers reported that sows given free access to cooled vs. uncooled water drank 20% more per day. Sows also weaned an 8% heavier pig in almost two fewer lactation days (Table 1). Warm drinking water in the farrowing house and resulting decreases in sow water and feed intake may partially explain the reproductive inefficiencies often seen during and immediately following periods of heat stress. Based on these data and Aussie field experience, for optimum performance and to relieve heat stress experienced by sows in the summer months, it was suggested that drinking water in the farrowing house never exceed 68°F.

Table 1. Effect of Water Temperature on Sow and Pig Performance in Lactation

Criteria	Water temp, °F		Difference
	41/59 ^a	77/90 ^a	
Sows			
Water intake, gal/d	14.9	12.4	+2.5
Feed intake, lb/d	12.3	11.9	+0.4
Wt loss, lb	22.9	19.4	+3.5
Pigs			
Wean age, d	26.0	27.8	-1.8
Wean wt, lb	20.2	18.7	+1.5

^a Night/daytime temperature of cooled and uncooled water. Study was conducted in Queensland, Australia during the summer months.