



COW SENSE CHRONICLE

JULY 2013

BEEF CATTLE WATER REQUIREMENTS

Of the six classes of nutrients — carbohydrates, fat, protein, vitamins, minerals, and water — water is the most often overlooked, yet the most critical. Cattle performance can be affected by water intake.

Water requirements are a bit of a moving target, as feeds contain water and the metabolism of certain nutrients in the body produces water. This means that not all the water needs must be supplied as drinking water. High moisture feeds such as silages or pasture have increased water content, while harvested forages such as hay and straw contain little water. Cattle water needs are influenced by temperature, physiological stage, and weight (Table 1).

Table 1. Typical daily requirements for range livestock. Source: Agriculture and Agri-Food Canada.

Cattle type	Gallons/day (Winter)	Gallons/day (Summer)
Cow-calf pairs	13	18
Dry cows	10	14
Calves	6	10
Growing cattle (400-800 lb)	6-10	10-14
Finishing cattle (800-1200 lb)	14	23
Bulls	10	14

Water intake increases dramatically at high temperatures; in fact, water requirements double between 50° and 95° F! Table 2 illustrates the daily water requirements in gallons per 100 pounds of body weight for cattle at 90° F. This implies that a spring calving cow-calf pair would require 28 gallons of water for a 1400-lb cow plus an additional 7-9 gallons for a 350-450-lb calf (some of this increased calf water requirement can be met by milk intake).

Table 2. Daily water requirements for cattle with a high temperature of 90° F. Source: University of Georgia.

Cattle type	Gallons/day, per 100 lb body weight
Cow-calf pair	2
Dry cow	1
Growing/finishing cattle	2
Bull	1

Providing unlimited access to clean, fresh water will ensure cattle performance is not negatively impacted. This goal becomes even more critical with increasing temperatures. Stay tuned for the August 2013 issue of Cow Sense Chronicle, to learn more about livestock water quality.

CONGRATULATIONS TO THE MSU ACADEMIC QUADRATHLON TEAM!

Drew Gaskill, Katy Klick, Russell Quinlan, and Lane Schmitt won the western region contest in June and will be representing MSU at the national contest in Indianapolis July 8-9. The Academic Quadrathlon is a 4-part animal science contest.

HAPPY INDEPENDENCE DAY!



JULY 2013

TRAVEL AND EVENTS

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
National Academic Quadrathlon Contest, Indianapolis						
<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>
<i>21</i>	<i>22</i>	<i>23</i>	<i>24</i>	<i>25</i>	<i>26</i>	<i>27</i>
	Grazing Workshop, Whitehall					
<i>28</i>	<i>29</i>	<i>30</i>	<i>31</i>			