Animal Alert: Heat wave on its way may cause problems for livestock producers and their animals.

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A heat wave is expected to engulf much of the Inland Northwest over the next week with daytime temperatures above 100 degrees in many areas. These temperatures will put livestock and pet well-being at risk. Commercial producers and youth with animal projects should prepare now for the upcoming heat and dangerous conditions. Here are a few general suggestions to keep your animals safe, but also keep in mind each of the various species of domesticated animals with have specific needs.

- Avoid stressful handling of livestock and if necessary only do so in the early morning hours or late in the evening.
- If animals are in a barn or shed, ensure that they have proper ventilation and air circulation.

- For animals outside, provide shade if possible.
- Provide a continuous supply of cool, clean water.

Water is an important factor in allowing animals' bodies to cool down and stay cool. Sufficient water is particularly important for animals that are lactating or pregnant to ensure health of the nursing young and health of offspring at birth. Watch for signs of dehydration (e.g. lethargy, drying of the mucous membranes and eyes, or eyes that appear sunken and dull). Clean water is also important: Note that excessive heat and stagnant water can promote blue-green algae growth which has shown to be toxic to livestock, wildlife, and humans. More information on blue-green algae can be found at

https://www.ag.ndsu.edu/publications/livestock/cyanobacteria-poisoning-blue-green-algae. The following table provides some insight into the amount of water and feed required by livestock.

Animal	Amount of water/day	Amount of feed/day
Lactating cows	20–25gal/day	Free choice hay, protein supplement to meet requirements
Dry cows	5-15 gal/day	Free choice hay
Lactating sow	3-7 gal/day	8 lb of grain
Dry sow	3–6 gal/day	2 lb of grain
Lactating ewe/doe	2.5–3 gal/day	Free choice hay, protein supplement to meet requirements
Dry ewe/doe	1–2 gal/day	Free choice hay
Chickens	1 gal/20 birds	3 lb of grain/20 birds
Horses	10–15 gal/day	Free choice high quality hay
Rabbits	0.1–0.25 gal/day	Free choice high quality hay
Llama/alpaca	2-5 gal/day	Free choice hay

Adapted from Markwick (2002), Almond (1995), and FEMA (2013).

Remember that during times of heat stress, it may be necessary to reduce the energy intake (e.g. grains and concentrates) and increase fiber in the diets of animals such as 4-H steers and lambs to help mitigate heat stress. In addition, endophyte infected forages (e.g. fescue or other

forages or crop residues containing endophyte) should be avoided as they may exacerbate heat stress in cattle.

Heat stress can also be made worse by high humidity. Animals find it more difficult to cool during times of high humidity. In general, the Inland Northwest does not experience high humidity during the summer. However, west of the Cascade Range the marine environment is more prone to higher humidity. In addition, areas to the east of the Cascade Range with vast areas of irrigated farmland are an exception and can experience higher humidity.

During and following heat stress, watch for signs of respiratory disease and digestive disorders in livestock. Wide temperature swings between day and night (say 40 degrees or more) can predispose livestock to infection.

Finally, high temperatures with low humidity increase the likelihood of wildfires across our region. Have an emergency plan in place to guide you in times of high temperatures and also for disaster preparedness such as wildfires. If you need assistance navigating this heat wave please contact your WSU Extension Specialists, County Extension Educators, Extension Veterinarians, or your local veterinarian. Our animals depend on us!