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Oh BEHAVE!

Behavioral Education for
Human, Animal, Vegetation
& Ecosystem Management

BEHAVE Outreach Program • 435-797-3576



The Newsletter for the
BEHAVE Research and
Outreach Program

Congratulations !!!

Jake Owens and Emily Lockard successfully defended their theses in July.

BEHAVE Principle of the Month:

Palatability is more than a matter of taste.

Often when we eat a new food, we may not like it but if we continue to eat it and it contains needed nutrients we begin to like the food. Why does this happen? When an animal eats a food, nutrients and toxins are released from the food and signals are sent from the gut to the brain to tell the body whether the food is useful to it. That mean palatability depends on feedback. Want to know more? [See the fact sheet.](#)

Time to Register for BEHAVE Conference

The BEHAVE Conference is quickly approaching. It will be held on October 28-30 in Park City, UT. Our theme is "Behavior-Based Management: Embracing Change from Genes to Landscapes."

Registration is \$180 per person and includes all meals and breaks from dinner on the evening of the 28th to lunch on the 30th. Deadline for early registration is September 25. Late registration is \$230 and cannot be accepted after October 20. For more information contact Rae Ann Hart at raeann.hart@usu.edu or call (435) 797-2556.

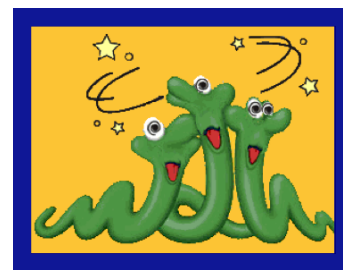
Our meeting will be held at Prospector Square in Park City. For room reservations call 888-283-3030 and mention the BEHAVE Conference. Room rates begin at \$83.00 per night.

We are also planning a poster session. If you're interested in bringing a poster, contact Beth at beth.burritt@usu.edu or (435) 245-4736 for more information. Space may be limited. Posters will be taken on first come first serve basis.

A detailed agenda and registration forms can be found on our [website](#).

Tannins May Be Bad for Internal Parasites

Tannins are secondary compounds produced by plants. Tannins reduce forage intake and protein digestibility but at the correct dose they may benefit ruminants by reducing the number of internal parasites. Most shrubs contain tannins as do sudangrass, birdsfoot and big trefoil, sorghum, sulla, sainfoin, and sericea lespedeza.



USU research assistant professor, Juan Villalba, and graduate student, Larry Lisonbee were curious if sheep infested with high levels of internal parasites would prefer to eat foods containing tannins when compared to sheep with low levels of internal parasites.

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**Your Source
for All Things
BEHAVE**

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Parasites (con't)

In the first study, lambs infested with parasites ate more of a supplement that contained tannins than lambs with low levels of parasites. This behavior continued as long as parasite levels in the infested lambs remained high. As the trial progressed, differences between groups became smaller and disappeared near the end of the study as parasite numbers in infested sheep declined.

During the second study, two groups of lambs with and without internal parasites were offered an alfalfa/tannin mixture. Intake and preference for the alfalfa/tannin mixture were not different between groups at the beginning of the trial or when parasite levels were low in

both groups. When lambs were infested with parasites, they had a higher preference for, and ate more alfalfa/tannin than lambs with low parasites levels. When lambs infested with parasites ate the alfalfa/tannin mixture their fecal egg counts (a measure of parasite infestation) also decreased. There was a direct relationship between the amount of alfalfa/tannin eaten and the decline in fecal egg counts.

These studies suggest: 1) lambs can detect internal parasite infestations, 2) they can learn about the relationship between the flavor of tannin and relief from internal parasites and 3) tannins can reduce parasite levels.



Great Reads:

I recently finished reading two great books related to behavior. The first is *The Brain That Changes Itself* by Norman Doidge. It overviews research on the plasticity of the human brain and despite its topic is surprisingly easy to read. The book outlines how our behavior actually shapes our brains and that the human brain can remain very flexible even when we are old. Good news for old folks and those who plan to become old folks.

The second book, *What Shamu Taught Me About Life, Love and Marriage* by Amy Sutherland, focuses on the behavioral techniques of exotic animal trainers and how we can use the power of positive re-enforcement to improve our relationships with other people. The book is based on the author's essay that appeared in the NY Times and can be viewed by [clicking here](#).

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