



# The Corral Bluffs Chronicle

*News from the Hoodoos*

December 2009

## CORRAL BLUFFS QUARTERLY UPDATE

- In November, Colorado State Representative for District 18, Michael Merrifield, toured the Bluffs with Corral Bluffs Alliance (CoBA) representatives.
- On the borders of the open space, CoBA put up forty-five no trespassing signs supplied by the City.



One of 45 signs along the edges of the open space.

## DO YOU KNOW A GROUP WHO'D ENJOY LEARNING MORE ABOUT CORRAL BLUFFS?

CoBA has developed a PowerPoint presentation full of beautiful photographs and interesting facts about Corral Bluffs' history, geology, archaeology, paleontology, wildlife and plants, as well as the vision for preserving more of the Bluffs. If you know of a group who'd enjoy this presentation, please contact Jackie Hilaire, CoBA President, at 683-8086 to schedule a time.



The Goodnight-Loving Trail was developed by Civil War veterans and cattle ranchers Colonel Charles Goodnight and Oliver Loving.



Charles Goodnight invented the chuckwagon.

One slide from our PowerPoint presentation

## CLEANUP HELP NEEDED

Every Sunday from 1-4PM (except holidays and bad weather days) your help is needed to clean up an old farmer's dump just north of the new Corral Bluffs Open Space.

Meet at the corner of Hoofbeat & Davis at 1PM. A map and weather updates are at [corralbluffs.com](http://corralbluffs.com). Wear old clothes, work gloves, sunscreen and tough-soled shoes.

You can keep any treasures you find. There are a lot of branches and boards that make good firewood. If you've never seen Corral Bluffs, we'll take you on a short hike on the rim before you help with the cleanup.

This is a perfect way to work on that New Year's resolution to get more exercise while helping to improve the environment!



A load of metal ready to go to the recyclers.

## CoBA CORNER

### \$5000 MATCHING GRANT PROGRESS REPORT

Thank you to those who donated \$1070 since the \$5000 Lumb-Hilaire grant challenge started. To donate, please see form on last page.

Please send newsletter corrections or submissions to [CorralBluffs@aol.com](mailto:CorralBluffs@aol.com).





## STONES AND BONES

*Contributed by Ken Weissenburger, geologist*

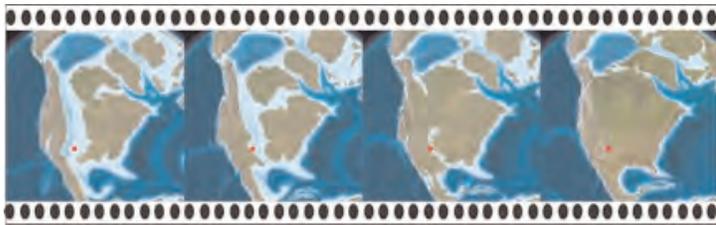
### WITHDRAWAL OF THE CRETACEOUS WESTERN INTERIOR SEAWAY

Many people know that oceans covered Colorado at various times in the geologic past. That leads to the frequently asked question of whether oceans were responsible for the sedimentary layers that make Corral Bluffs.

The answer is no. The layers of the D1 sequence (or Dawson Formation) at the Bluffs are continental deposits laid down in river, floodplain and swamp environments. But the oceans had just departed the scene.

If we imagine the coming and going of the Cretaceous Western Interior Seaway as a movie, then the deposits at Corral Bluffs would be the frames right after the departure of the sea.

Such a movie, showing the receding seaway, might look like this:



From left to right are four reconstructions of North America at 85, 70, 65.5 and 60 million years ago. The red dot is the location of Corral Bluffs.

Our best interpretation of the cliff-forming beds at Corral Bluffs is that they were deposited between 64.5 and 65.5 million years ago, i.e., in the first one million years after the K/T (Cretaceous/Tertiary) boundary.

*Images from Ron Blakey, emeritus professor of geology at Northern Arizona University.*

### NOVEMBER BALLOT ISSUE FAILURE MEANS LAYOFFS

Due to voters lack of support of the property tax increase on the November 3rd ballot, the Parks, Recreation and Cultural Services Department is laying off staff. Now, more than ever, volunteers are needed to help maintain parks and open spaces. To help, contact Amy Ellison at (719)385-6520 or cityparkvol@springsgov.com.

## GUIDED TOURS

CoBA led seventeen guided tours of the new Corral Bluffs Open Space this year. About 300 people took the tour.

Tours resume on February 6th, weather permitting. See corralbluffs.com for schedule and details. Email CorralBluffs@aol.com to reserve your place.



*Please remember, Corral Bluffs is not yet open to the public, except through guided tours. There are many months of expert studies and master planning ahead before public access is available.*

## FREE GREENS

Next spring, instead of pulling those pesky Russian Thistles, have them for dinner! Russian Thistle, aka tumbleweed, is a member of the goosefoot family, which also includes beets and spinach. Dryland homesteaders in Colorado used young Russian Thistle as a vitamin-rich addition to their sparse diets, and you can too.



### Thistle Mignon

2 cups young Russian Thistle plants, 4-5 inches tall  
1/4 cup chopped onion  
1/2" piece of ginger root, finely chopped  
2 tbsp. butter  
2 tbsp. olive oil  
2 tbsp. tamari sauce  
1/2 cup grated gruyère or other cheese

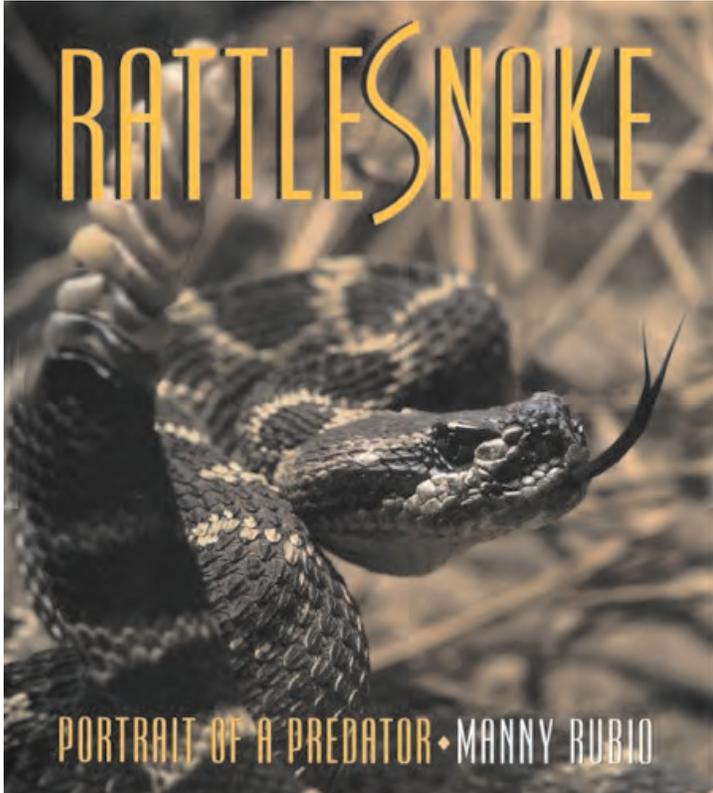
Remove roots and wash thistle. Put thistle greens into boiling water for about 5 minutes. Drain well. In a large saucepan, saute onion and ginger root in butter and olive oil. Stir in tamari and thistle greens and cook for 1 minute. Transfer to an oiled casserole dish. Top with grated cheese. Place under the broiler until cheese is bubbly. Serve hot.

*Adapted from the book "Edible & Useful Wildplants of the Urban West" by Alan & Sue McPherson*

## RATTLESNAKES

Which of the following are true?

1. A rattlesnake's age can be told by the number of segments on its rattle.
2. Rattlesnakes always rattle before striking.
3. Hybrids of bullsnakes and rattlesnakes lack rattles but maintain the venom and have the speed of the bullsnake.
4. A fatally injured rattlesnake will not die until sundown.



**Answer:** According to the book “Rattlesnake” by Manny Rubio, none of the above are true. His well-researched book, full of photographs, explains rattlesnakes in depth. Following are more facts from his book.

Rattlesnakes are found only in the Americas and are in all states except Maine, Rhode Island and Delaware. There are about 83 different living species and subspecies. Their sizes vary from two to five feet long for adult snakes.

The majority of rattlesnakes live near fairly open, rocky areas, preferably with a southern exposure. Rocks supply protection, basking sites and an abundance of food. Some species live in savannas, prairies, deserts, marshes, and forests.

Rattlesnakes eat lizards, rodents, birds and their eggs, frogs, fish, arthropods, insects and other snakes. They hunt by waiting near frequently used trails of their prey. They will also eat carrion.

They'll strike and release a small rodent and then track it after it dies in a few minutes. For

prey that can run, hop or fly great distances, they'll strike and hold the prey until it dies.

Aside from migrating to and from denning sites and finding mates and food, rattlesnakes conserve energy by traveling as little as possible. What a rattlesnake eats in a year would equal a single meal for a coyote. Rattlesnakes may eat as few as six adult rodents in a year.

In a year, they need to drink at least the equivalent of their body weight. Water is very important to them and snake activity peaks during rainy weather.

Snakes and prey are less likely to prowl on moonlit nights. There is also a significant drop in snake activity when it's windy.

When habitat is ideal and food abundant, it's not uncommon to find rattlesnakes living in groups.

Rattlesnakes don't make their own burrows. They hibernate in rock cavities, animal burrows and rotted out tree roots below the frost line. Dens are almost always in rocky hillside outcroppings with a southern exposure. Fairly confined spaces are preferred, such as rock ledges with numerous crevices or a small opening between boulders leading to deep fissures. Abandoned wells, mineshafts and house foundations are also suitable for hibernating snakes.

Prairie rattlesnakes, the common species at Corral Bluffs, migrate from summer foraging sites to communal dens to hibernate for the winter. They'll travel as far as four miles or more to their winter den, called a hibernaculum, and return to the same den year after year. As few as six and as many as 200 snakes will heap together to hibernate. (See photo below.)

They'll come to the surface near their den to bask and drink water when air temperatures reach 55° or warmer. (*continued on next page*)



*Rattlesnakes sunning near their hibernaculum. (No, this photo wasn't taken at Corral Bluffs.)*

(continued from previous page)

The three sensing organs of rattlesnakes are their heat-sensing facial pits, tongue and eyes. Rattlesnakes are pitvipers. The small pit between the nostril and eye on both sides of their face allows them to register a very detailed heat image of prey or predators.

Snakes don't see very well and they can't hear, but they can sense vibrations in the earth. When they prepare to shed their skin, what vision they do have becomes cloudy.

Unlike fish scales, snake scales are folds in a continuous covering. The creases between the scales unfold, allowing their skin to stretch when



they eat large prey. They can shed their skin 1-6 times per year. Each time they shed, a new rattle is created. Rattles regularly break off from wear.

All snakes are cold-blooded, which means

they rely on an exchange of body heat with their surroundings. Snakes are frequently found basking in the early morning or late afternoon, avoiding the potentially lethal rays of direct midday sun.

Snakes will die if their internal temperature surpasses 110° for even a few minutes. Temperatures below freezing will not immediately kill them. They can recover from temperatures as low as 4° and even thrive in 37° weather for several days.

Rattlesnakes spend a great deal of time hiding because of the effect temperature has on them. Some prairie rattlesnakes are inactive for as much as 7-1/2 months of the year.

### RATTLESNAKE BITE DOS & DON'TS

Rattlesnake venom contains digestive juices and neurotoxins and can cause considerable physical damage or even kill an adult human.

#### If bitten by a rattlesnake, do not:

- make any incisions
- apply suction with the mouth
- apply pressure or squeezing at the site of the bite
- use tourniquets or other constrictive devices
- use ice or ice-water immersion
- inject antivenom
- use a stun gun or electroshock

#### If bitten by a rattlesnake, do:

- use an extractor immediately, such as the Sawyer Extractor
- proceed to the nearest medical facility as quickly as possible
- remain as calm as possible
- reduce physical activity and exertion
- immobilize the bitten area with a splint and keep it below the level of the heart
- remove tight-fitting garments and constricting jewelry
- try to identify the snake and its approximate size



*The Sawyer Extractor is available at REI and amazon.com*

### I'D LIKE TO JOIN CORRAL BLUFFS ALLIANCE.

(Please check one level.)

- Supporter - \$25.** You'll receive email updates on how you can help.
- Contributor - \$100.** Same as above, plus you'll receive a free bumper/window sticker
- Conservationist - \$500.** Same as above, plus the knowledge that you're contributing toward land acquisition, expert research, required technical studies, educational materials, postage, printing and advertising.

**Make your check out to:** Trails and Open Space Coalition (TOSC) and write CoBA on the memo line. TOSC has graciously allowed us to use their tax exempt status until we attain our own so your donation is tax-deductible.

**Mail to:** Corral Bluffs Alliance, P.O. Box 81, Peyton, CO 80831

#### Please print clearly

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone (\_\_\_\_\_) \_\_\_\_\_

Cell phone (\_\_\_\_\_) \_\_\_\_\_

Email \_\_\_\_\_

- I'm willing to volunteer time to help.
- I've enclosed \$ \_\_\_\_\_ to be matched by the challenge grant.