This year’s conference was a great success! We had 54 participants from all over the Rocky Mountain West and the United States. The speakers covered a variety of topics within the theme of “Artiodactyls, Perissodactyls and Whales” (oh my). Each of the talks was unique and while all of them were technical enough for the scientists, none of them were so technical that the average person couldn’t understand them. Keynote speaker, Hans Thewissen’s talk about the evolution of whales from land animals to the ocean dwelling animals we know today was interesting, engaging, and easy to understand. The specimens that he brought with him illustrated the finer points of the whale’s evolutionary developments.

We had two days of great field trips to the White River Badlands. We would (continued on page 4)
MEMBERSHIP:
June was membership month. If you didn’t renew your membership in June, this will be your last newsletter. You can renew at caspercollege.edu/tate. Please renew today!

Along these lines, do you receive our email reminders? We send out reminders for all of our museum events. If you are not getting these reminders, we don’t have your email. Please send your current email address to dschaff@caspercollege.edu or include it on your membership form so you don’t miss out on upcoming events.

LECTURE SERIES:
Our Spring Lecture Series “Caves” wrapped up in mid-May with Bob Montgomery’s talk. Bob’s talk was well attended, interesting, and informative. He gave his presentation in his cave exploring gear for an added twist. The Tate would like to extend a big “thank you” to all four of our speakers. They helped to make this speaker series a great success.

RAFFLES:
Local resident, Shannon Forbes was our lucky amethyst raffle winner. Thank you Lynne Swank for helping find such a special specimen for the raffle.

If you didn’t win this one though, don’t worry! Local company Goolsby, Findlay and Associates has kindly donated a second atypical amethyst to the museum for another raffle. This beautiful specimen will be on display at the museum starting the first part of July. The lucky winner’s name will be drawn during our 35th Anniversary party on Friday, August 21, 2015 at 6:30 p.m. Tickets are one for $5 or five for $20. Stop by the museum to purchase your tickets!

AWARD WINNER:
In other news, our very own Russell J. Hawley was the 2015 Casper College Robert Durst Classified Staff Award recipient. Russell was selected out of six nominees to receive this prestigious award. Give him a hearty congratulations on a job well done next time you see him!

35TH ANNIVERSARY PARTY:
In celebration of the Tate Geological Museum’s 35th and the Essence of Rex’s first anniversaries we are going to have a party! Join us at the Tate on August 21 from 4-7 p.m. for food, games, activities and all around fun. We plan to have both indoor and outdoor activities along with a cookout, so bring the family for dinner and fun. See you there!
Stibarus is one of the rarest animals in the White River Formation. In 1940, when Scott and Jepsen published their monograph on White River artiodactyls there were two badly preserved skulls known, and a few jaw pieces. This was at a time when probably thousands of mammal skulls had already been collected from the White River Formation. Other than this featured specimen, I do not know if any other skulls have been found since 1940. The online Paleobiology Database lists 36 specimens in 36 museum collections.

I imagine most of these are isolated jaw pieces. So, yeah … rare.

This specimen above was found by Dr. Kent Sundell in his fossil hunting area east of Douglas, Wyoming. It is the best Stibarus skeleton known yet. Possibly even the only specimen with any postcranial bones. Eddy Gojmerac delicately prepared it out of a nodule. It was mostly disarticulated, and scattered. The skull was exposed on the edge of the nodule, and partially eroded away.

The general build of Stibarus is similar to other members of the extinct family Dichobunidae. Dichobunids include the oldest artiodactylys (even-toed ungulates) dating back to about 55 million years ago (the early Eocene). Chevrotains (rabbit-sized deer that live in Asia and Africa) are structurally a modern analog to these archaic ungulates, with their small size, thin delicate legs, pointy snouts and arched back.

At our recent conference, TJ Meehan of Rockhurst University talked about this
like to send a special “thank you” to Dr. Kent Sundell for letting us have not one, but two field trips out to his fossil collecting site. Our second site, located outside of Lusk, was inaccessible due to the flooding in the area and Kent generously let us invade his place for a second day. We would also like to thank Jim Schmiedt of Old Dead Things and Jody Craig from the Sunset Bar and Grill for the fabulous food on our field trips. Lastly, we would like to thank Ann Dalton, Steve “Fluffy” Bennett, and Terra Hess for helping out with the preparations, set ups, tear downs, and field trips during the conference. We couldn’t have done it without all of you.

Thank you!

Volunteer of the Year
Liane Herring
specimen. Although those fossils show the general form of *Stibarus*, the most interesting thing that was revealed about this animal was its feet. The unguals (claws) of *Stibarus* looked like little snorkeling flippers; they were flat and had a wide flat flange of bone on either side that ended in a square-edged paddle. This is very unusual, not only for artiodactyls, but for mammals in general. Meehan suggests this is an adaption for a watery life, either walking on water vegetation and mud, or paddling about underwater. As the White River Formation is generally thought to be deposited in a savannah-like setting, the rarity of *Stibarus* fossils may be due to their having lived in the wetter parts of the local landscape.

The photo on page 3 shows the skeleton as we have reconstructed it. We have a lot more pieces of it, but they are not readily identifiable. Many of the larger bones are broken, (shoulder blade, pelvis, leg bones) or missing; this little fellow was probably eaten by a larger carnivore. The next two photos to the right show close-ups of the front foot showing the paddle-like unguals, one in side view, and one in end-on view. In case you are not sure what to look for, compare the claw bones to the drawing Russell made of one of them: notice the wide flat aspect of these toes.

During the conference we discussed the pronunciation of *Stibarus*. No one could say with any certainty whether it is STIB-ur-us or stib-Ah-rus.

We thank Dr. Sundell for donating this specimen to the Tate Geological Museum, and to Eddy Gojmerac for the wonderful prep work.
First of all, please welcome our new work-study student, Samantha Wood. She hails from Gillette and is a general education student at Casper College with an eye toward studying biology/botany in the future. Mother to three young children, she has lived in Wyoming all her life and is looking forward to learning about the animals she sees regularly in the state.

The Werner was always a good place to visit, but improvements made over the last 30 years have made it a great place to visit. Improved lighting throughout the museum and better arrangement of the exhibits facilitate viewing and impart a comfortable, welcoming ambiance. Another improvement made a few years ago is the replica of an antique taxidermy shop built by maintenance employee Blake Harkins.

Using cull lumber to imitate age, Blake constructed the exhibit at his Casper College shop, and then took it down in pieces in order to install it in the museum. His attention to detail is remarkable: he notched all joints, built an old-fashioned boardwalk, and constructed doors like those that were common a century ago. John Stevenson of Wyoming Taxidermy not only donated all of the materials to go in the taxidermy exhibit, but also acted as a consultant on the project. He guided us and helped to make the taxidermy exhibit realistic and educational.

The bird feeding stations and patio have been updated and are ready for visitors, both avian and human. Bring a snack and something cold to drink and spend a hot summer afternoon sitting in the cool shade of the patio watching the birds gather at the feeders and birdbath. If you are lucky, you’ll be there for a visit from local deer and antelope.

The meeting area in the Africa/Arctic room has been improved with comfortable chairs, a hands-on exhibit of European mounts, and new display animals, including a leopard, a topi, and a nyala, also known as an inyala. No idea what I’m talking about? Visit the Werner and find out! Coming soon will be a book and media center, and of course, the coloring area is always open.

Big changes are taking place this summer in the downstairs diorama room too. At long last, the children’s area is underway. Interactive materials are being ordered, and construction on a cave is slated to begin in June. The diorama will remain open during construction and we hope you’ll pardon the temporary disarray of the adjoining room.

A Werner sponsored nature writers’ group will begin in the fall and will be open to anyone who actively writes about wildlife, wilderness, ecology, and related topics. Those interested should call the Werner at 307-235-2108.
Q: You’ve often said that science fiction writers used to assume that there were dinosaurs on Venus. Can you give specific examples?
– Michael Bylsma, Thermopolis, Wyoming

A: Dinosaurs on Venus!
Part Two (continued from the last issue)

Another interesting saurian from Lost on Venus is the kazar. The kazar is a quadruped the size of a German shepherd, but there the resemblance ends. It has a beak similar to that of a parrot and a series of three short horns in front of its ears. Perhaps prophetically, Burroughs described the kazar as covered with feathers, but was quick to point out that it isn’t a bird since it has no wings and walks on four legs. The feathers along its back can be raised to indicate aggression. Because of their speed and ferocity, packs of kazars are sometimes used for hunting – the only drawback is that, since they have no qualms about cannibalism, they will quickly fall upon and devour any pack member who becomes injured.

Surprisingly, the next writer to depict prehistoric life on Venus was H.P. Lovecraft, an author better known for tales of tentacled horrors from the depths of the sea. In In the Walls of Eryx, co-written with Kenneth J. Sterling in 1935, they describe a prospector’s search for precious crystals in the jungles of Venus. Lovecraft’s Venus is kind of like a cross between a carboniferous coal forest and Harry Harrison’s Deathworld. He indicates that the foliage is similar to that of Earth’s Paleozoic era, even identifying such specific plants as cycads and Lepidodendron. But added to this are the constant dangers of poisonous gasses, treacherous mud-traps, man-eating plants, and hordes of reptilian predators. Dominant among these are the scaly man-lizards.

Man-lizards are so-called because of their flat heads and their green, slimy frog-like skin, but Lovecraft reminds us that they have no point of contact with terrestrial reptiles. They walk erect upon their stumpy hind legs, which end in suction pads that provide greater stability on marshy ground. The forelimbs are used as arms, with dexterous hands that can make use of a few primitive weapons including swords and blow-darts. They communicate through the movements of four long, ropy tentacles hanging from the chest. Man-lizards seem to grow continuously – the prospector in the story encounters individuals ranging from 130 centimeters to almost 2½ meters tall. Large, fully mature man-lizards may develop a short, tapir-like trunk.

Dinosaurs on Venus will continue…

Below: Kazar (left) and Man-lizard (right).
Tate Museum Event Calendar

JULY
11-12 Casper Rock and Mineral Show
13-17 Museum Adventure Quest Summer Camp
16  Werner Wildlife Museum – Raptor Rap: Field Trip, TBA, 4 p.m.
18  Adults Members’ Only Dig – location TBA

AUGUST
8  Kids Only Member’s Expedition – location TBA, 9 a.m. - noon
20  Werner Wildlife Museum – Raptor Rap: Field Trip, TBA, 4 p.m.
21  Tate 35th Anniversary Party!, 4-7 p.m.
24  Casper College fall semester begins
24-28 Tate Dinosaur Dig – Como Bluff

SEPTEMBER
12  Adult Members’ Only Dig (Rescheduled from May)
14-18 Tate Geological Museum Dinosaur Dig – Como Bluff
16  Coffee, Tea & Dee, 7:30-11:30 a.m.

VOTE FOR DEE THE MAMMOTH!

Dee made it onto the “Wyoming’s Most Significant Artifacts” Top 25 list. Now we need to help him make it into the Top 10! Vote for Dee by following the link below or scan the QR code with your smartphone for a direct link.

www-lib.uwyo.edu/wyoming/top_ten_historical_artifacts/home_wyoming_artifacts.cfm