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Armored Horses along the Musselshell River:

Evidence of Early Contact in Montana

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By the time Thompson arrived in northwestern Montana, horses had been in the state for over 75 years, and with the coming of the horse came accoutrements such as bridles, saddles, and even armor. In 1805, while in southwestern Montana, Lewis and Clark saw a Shoshone riding a horse with armor and described it as a coat, which was formed by many folded dressed antelope skins held together with a mixture of glue and sand. Although we have almost no ethnohistorical references to horse armor for the northwestern Plains and adjacent mountains, the rock art of these areas shows us it was known and used throughout the region. With five of these figures along the Musselshell River in central Montana, today this valley is home to more recorded armored horses than any other limited geographical area on the Northern Plains. The Musselshell also has the distinction of having the only painted armored horse; however, based on the number of new figures identified since 2000, it is likely not to hold this position for long.

Armored horses in rock art became a hot media topic in 2004 when Mark Mitchell published an article on the figure type in the journal *Antiquity*. He focused on horses in Colorado and Kansas, of which there were four known. These included three in two Colorado sites, and one in Kansas. He also reviewed the known horses on the Northern Plains, which at that time included eight and only one along the Musselshell.



Verdigris Coulee, Writing-on-Stone, Alberta, Canada

Jim Keyser was the first to report armored horses in Plains rock art. In the 1970s he published on two at Writing-on-Stone in southern Alberta (see drawing to left). Both of these figures are depicted with shield body riders shooting arrows, and the horse armor at this site is shown as full of hatched lines so the interior aspects of the horses and shield riders are hidden, but in both cases the feet of the horses are outside the armor. One of the most important aspects of this publication was that it motivated people to look for and recognize horse armor.

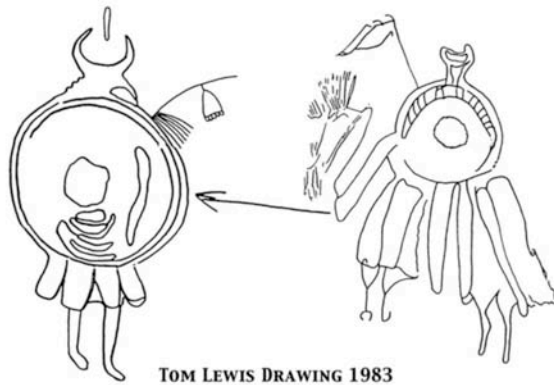
South Dakota: Armored Horses



In the 1980s Keyser published on two armored horses from the North Cave Hills in northwestern South Dakota. Like the Writing-on-Stone horses, the riders have shields, and the horses' feet protrude below the armored bodies. The armor on the larger horse has lines along the back, making it one of two with this decoration; the other is in central Wyoming.

The only painted armored horse was first reported in 1960 and 1962 by Stu Conner, who filled out two

site forms on the Goffena site along the Musselshell. However, at this early date, the horse armor was not recognized. In 1983, Tom Lewis (a psychiatrist from Boyd, Montana, who is now deceased) published this site, and although he discussed the body armor on the pedestrian warrior, he did not mention the armor on the horse, but his drawing of the horse and rider may have had something to do with it. The drawing he published in *The Wyoming Archeologist* of this horse is shown here to compare with a 2004 enhanced photograph of the figure and a recent drawing of it focusing on accuracy of details.



TOM LEWIS DRAWING 1983

GOFFENA ARMORED FIGURES
24ML408



2004 GREER PHOTO



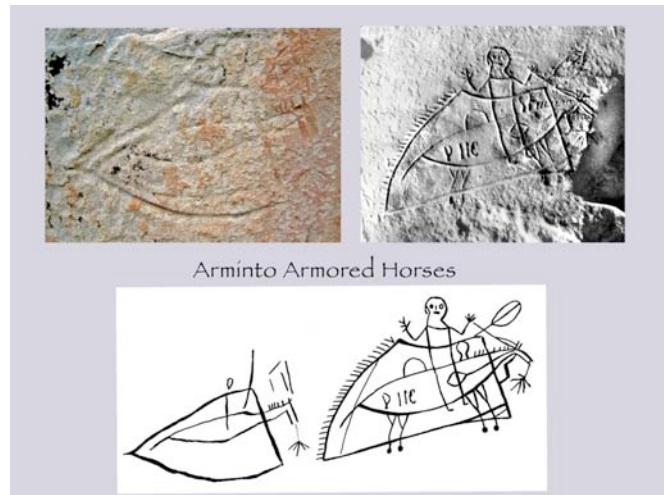
SONYA NIVA DRAWING 2007



In 2000 David Moyer (at the time an archeology student at the University of Montana) presented a paper at the Plains Conference on the Nordstrom-Bowen site in the Bull Mountains north of Billings, where he convincingly argued that a figure previously identified as a tipi is actually an armored horse and rider based on better drawings and photographs than those originally circulated. At the same time Keyser had independently come to the same conclusion about the Nordstrom-Bowen figure. The armor has radiating lines that originate at the

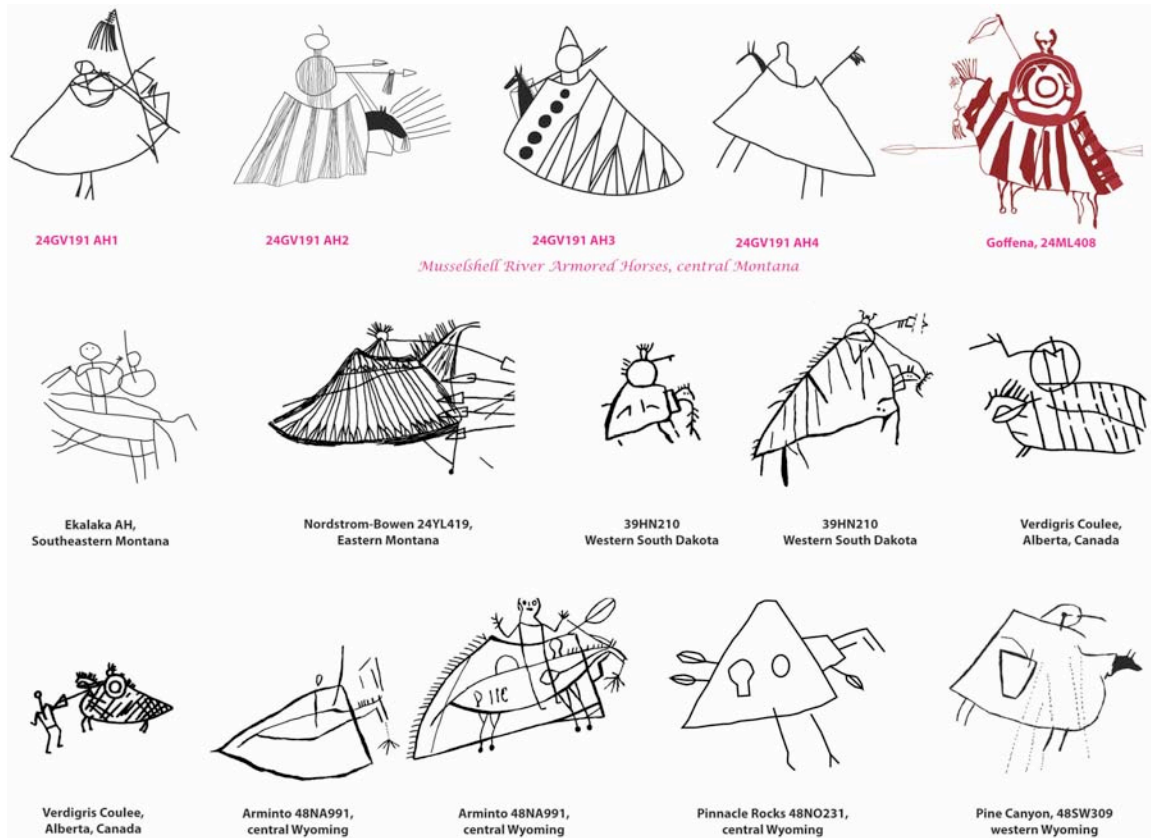
rider and fan out toward the bottom, which may represent decoration, such as feathers, or portray a layered manufacturing technique (as noted by Lewis and Clark), either way, the interior of the horse and rider are hidden from the viewer.

The paper by David was of great interest to us because in February of that year we had recorded two armored horses west of Casper and were in the process of researching the topic throughout the Plains. After presenting two papers on the site, in 2005 we joined with Keyser to publish on these two central Wyoming horses. The armors are both shown in outline so that the horses and riders can be seen, and this has been rarely recorded for armored horses. The only other one known on the Northern Plains is near Ekalaka in southeastern Montana, but it is not shown in such detail. Additionally, both Arminto horses have a partial star-like pattern below their mouth, which is not duplicated in other Northern Plains armored horses. The lead horse has lines along the back of the armor, like the one in the North Cave Hills, and these lines may portray fringe, feathers, or possibly projecting menacing horns.



Today (2009) there are twenty armored horses known in Northern and Central Plains rock art. In addition to the four central plains horses in Mitchell's article, Linea Sundstrom brought another in Kansas to our attention (shown on the left in a 1938 photograph she provided). She speculates it may be covered by the Wilson Reservoir today. In addition to the five central Plains armored horses, on the Northern Plains there are seven in Montana, four in Wyoming, two in South Dakota, and two in Alberta.

All fifteen Northern Plains horses are shown below. They are not scaled to one another.



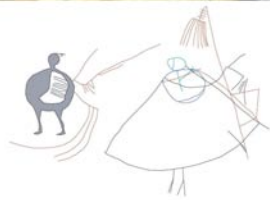
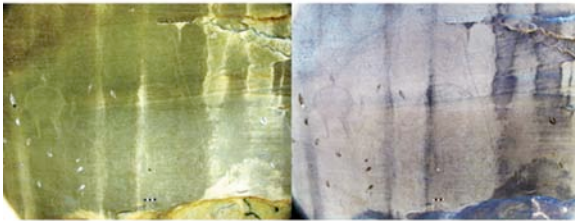
Turning now to the Musselshell, the five recorded armored horses are shown on the top row above, but they are likely to be joined by more as survey and recording continue in the area. For example, a lightly incised petroglyph at 24ML398 has recently been identified as armor, minus most of the horse. This image is difficult to photograph and even enhance and is a sixth example in the valley.



The Musselshell River originates in the Little Belt and Castle Mountains of central Montana and flows east through the plains creating a wide bottomland bordered by sandstone outcroppings before turning north to run into the Missouri. Petroglyphs dominate the rock art of the east-flowing Musselshell, and the diverse figures at these sites indicate a long use of this drainage for rock art by the many tribes that traversed the area. However, post-1700 horse-era images dominate in the valley.

The Musselshell armored horses have been found at two sites. The four petroglyph depictions are at the large site 24GV191, and the painted armored horse at the Goffena

site is about 40 miles east of 24GV191. The 24GV191 horses are part of a series of glyphs that form many panels and date to different time periods, while the Goffena horse is one of fewer paintings in a more limited area but still with different colors and media suggesting more than one visit to the site and probably by different groups. Neither site is in a prominent or unique location within this environmental setting, and like other locations where armored horses are found on the Northern Plains, the settings strongly suggest that the horses were not placed at these locations to announce any message to a large audience, but instead served a personal function possibly illustrating their story for themselves or their immediate group.



24GV191
Armored Horse 1

The 24GV191 armored horses are all easily recognizable as such, but no two are exactly alike. Horse 1 is flanked by a shield bearer to the right and to the left. The armored horse and rider are incised and not as precisely made as numbers 2 and 3 at this site. The armor is depicted as a triangular skirt with a curved bottom, and a collar to cover the neck of the horse. The horse's head has been lost to calcium carbonate deposits, but a series of lines to the lower right of the collar suggest the horse had a decorative bridle, as is associated with many Northern Plains

horses, both armored and not. The shield-covered rider at the top opening of the armor is not drawn in detail. However, there is a deliberate slash across the face, and one arm and hand are easily seen as is a suggestion of reins. In front of the rider is a long, vertical lance with a tassel extending from the top, which may represent a scalp.

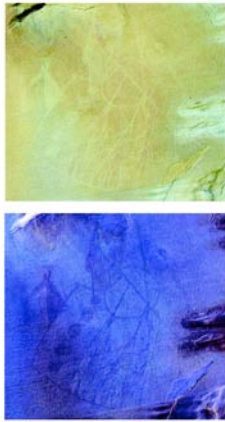
Far to the right is a pedestrian warrior, and closer to the left (and shown in this slide) is another warrior facing left away from the horse. Although armored horses are often portrayed with pedestrian warriors, such as those at Writing on Stone, in the North Cave Hills, and even the painted horse along the Musselshell, this scene does not clearly depict the armored horse interacting with the pedestrians as it does at other sites.



24GV191
Armored Horse 2

The second armored horse at 24GV191 is very large relative to others of this figure type. It measures about 1.8 meters long and 1.5 meters tall. Although dense calcium carbonate deposits surround the incised petroglyph and cover part of the rider, it is still possible to see most of the lines that comprise the image. The horse armor has broad slightly expanding stripes forming a pattern similar to those at the Goffena painted armored horse. There is no obvious collar around the horse's head,

which is curved with clearly depicted ears and crowned with rays. There is a tassel off the end of the nose, which may be a scalp. Reins outside the armor end at a lance extending from the front of the shield-bearing warrior riding the horse. The warrior has a wide neck and what appears to be a single feather or ponytail extending from an oval head. Protruding from the shield is a plain arrow above the long lance, which supports a tied knot securing feathers or a scalp.



24GV191
Armored Horse 3



Horse 3 is precisely made with a combination of incising and abrading. The typical triangular shaped armor has an opening in the top for the rider and a collar to protect the neck of the horse. Triangular designs on the armor body are like those covering the Nordstrom-Bowen horse. Presumably these are highly stylized arrow feathers or wand-type figures, but they may instead be portraying layered leather. A row of five dots decorate the front of the 24GV191 3 armor. This decorative pattern has not been observed on any other armored horse in rock art. No recognizable

feet extend below the horse armor. The horse has an unusually clear eye, and a short stand-up mane. The pointed-headed rider is mostly outside the horse armor but is protected by a personal shield. Possible reins extend from the horse's neck to the bottom of the rider's shield (presumably the location of his hands), but lines extending out the other side of the shield appear to line up with the possible reins suggesting these lines may represent something else, or those to the right of the shield are a weapon that is no longer discernible.

A large shield to the right of the rider and at the top of the armor was apparently placed on the wall prior to the armored horse based on superpositioning. The shield figure area was first painted red, and then the shield portion was incised around the circumference. The head of the shield figure and an extension from the head to the upper left were not incised, and the red paint of those areas can still be seen clearly.



24GV191
Armored Horse 4



Armored horse 4 lies between 2 and 3 and is on a busy panel with several horses and riders without armor. The armored horse was not the first of the figures to be incised in this area based on superpositioning, but it was not the last. The armor does not have any decorative elements, and this appears to have been intentional to allow the underlying horse and rider placed on the wall first to show through. The long, pointed ears on the armored horse are the same as those at Horse 3, and the solid horse head of 4 is similar to the style of both Armored Horse 2 and 3 at this site. The rider is not

well done, but the generally rounded body suggests a shield, while a distinctive lance with dangling feathers protrudes from the back of the armor. The unarmored horse has a stand-up mane and a decorated bridle bit. The rider carries a lance similar to that associated with the armored horse. Although the armored horse was drawn after the unarmored one, they were probably placed on the wall within a short time frame.

Goffena Armor Panel
24ML408



is made in the same red liquid paint as the armored horse indicating they were placed on the wall as a single scene. The pedestrian warrior also carries a lance, has a horned headdress, and is protected by a shield. In addition, this warrior has body armor, which although known ethnographically to exist in the region, is not commonly seen in rock art.

Although armor and other accessories are generally assumed to have been based on Spanish design, it was a logical progression from the large personal body-covering shields of the pre-horse Northern Plains to the larger horse and rider body-covering shields of the post-horse era. Armor was painted and perhaps otherwise decorated with fringe, feathers, pelts, and animal horns, although in rock art what is perceived to be decoration in some cases may be indicative of layering in armor manufacture. Small differences in construction style and decoration between armor portrayal may provide clues to cultural affiliation as the database expands. Earlier research suggested that the Shoshoni used the armor on the Northern Plains and their Comanche relatives were the users on the central Plains, but there is no reason to think that the Blackfoot Confederacy (especially the Piegan), Crow, Assiniboine, Cree, Sioux, and Gros Ventre were not also using this horse protection in central Montana, since all these tribes used the Musselshell valley during the horse period. The Flathead also made the journey to hunt the eastern plains for buffalo well into the 1800s. Andrew Garcia, who lived in the Musselshell area in the late 1870s discusses a large band of Pend d'Oreille that also included some Spokane, who came to the Musselshell valley to hunt buffalo, expanding the number of tribes that could have made the armored horses. Garcia reports that the Musselshell country drew the western as well as the northern tribes because bad weather in Alberta drove the buffalo south to winter in the Musselshell area. This popular wintering

location may account for the denser rock art in this area, but it also complicates assigning cultural affiliation to the rock art of the valley.

Horse armor is traditionally viewed as being employed for use in warfare, and associated shields and weapons have been used to support this function. Of the fifteen armored horses on the Northern Plains, ten (or two-thirds) have riders with personal shields, and the rider of the Nordstrom-Bowen horse is covered with personal



body armor similar to his horse's armor. Nine of the fifteen riders have associated weapons, and it is interesting to note that although the gun predated the horse in this part of Montana, there are no depictions of guns associated with horse armor along the Musselshell, or at any armored horse panels on the Northern Plains. Five armored horse riders are shown actively engaged in conflict with pedestrians, presumably in battle. No riding warrior is fighting another mounted rider, and the pedestrian warriors all have large body-covering shields indicating that they are on foot and not just temporarily off their horses. In all but one case, the mounted warriors fighting the pedestrian warriors appear to be on the winning side as they do not have any arrows in their armor. However, at Pinnacle Rocks, in eastern Wyoming, the armored horse appears to be retreating with two arrows in the back of his armor that were apparently shot by the pursuing pedestrian warrior. The pedestrian warriors at Writing-on-Stone are of nearly equal size to their mounted opponents, as is the one at Goffena and at Pinnacle Rocks, apparently indicating equal status to the mounted and foot warriors. The armored horse at Nordstrom-Bowen is on the receiving end of arrows, but from an unidentifiable source facing the horse. All these indicators suggest armored horses engaged in battle. Although weapons are present with three of the four 24GV191 armored horses, and the fourth may have had a weapon, which is now eroded away, none is engaged in a battle scene. Weapons in these cases may be portraying the practice of not going out without personal protection, and the horse armor may have been for environmental purposes, such as keeping the horse and rider warm.

The conflict context does not preclude armor from also functioning in an environmental context or as symbolic rather than practical protection. Losing horses due to harsh environmental conditions, such as cold, is a topic found in ethnohistoric accounts, and the loss of horses is also mentioned on several occasions in Lakota winter counts, further attesting to the seriousness of the problem and its impact on Native populations.

In conclusion, because the Northern Plains was not culturally homogeneous but was home to different and competing cultural groups, with tribal range, power, influence, and alliance changing across space and time, beneficial technological adaptations, such as armor for horses, would have been accepted and adopted by competing groups relatively quickly. While the main idea for horse armor surely came through the Spanish concurrent with the introduction of the horse, armor construction used local techniques and materials and incorporated local aspects of design as can be seen in the decorative variety shown on the Northern Plains rock art horses. Although currently we cannot assign tribal identify based on differences in armor portrayed in rock art, the increasing database is providing more patterns to compare with ethnographic information on designs and regional distributions of these differences. Thus, in the not-to-distant future, we may be able to determine cultural affiliation in the same manner that distinctive designs have been used for tracing tribal identity of rock art shields.