CONGENITAL FETAL HYPOTHYROIDISM SYMPTOMS IN PRONGHORN ANTELOPE

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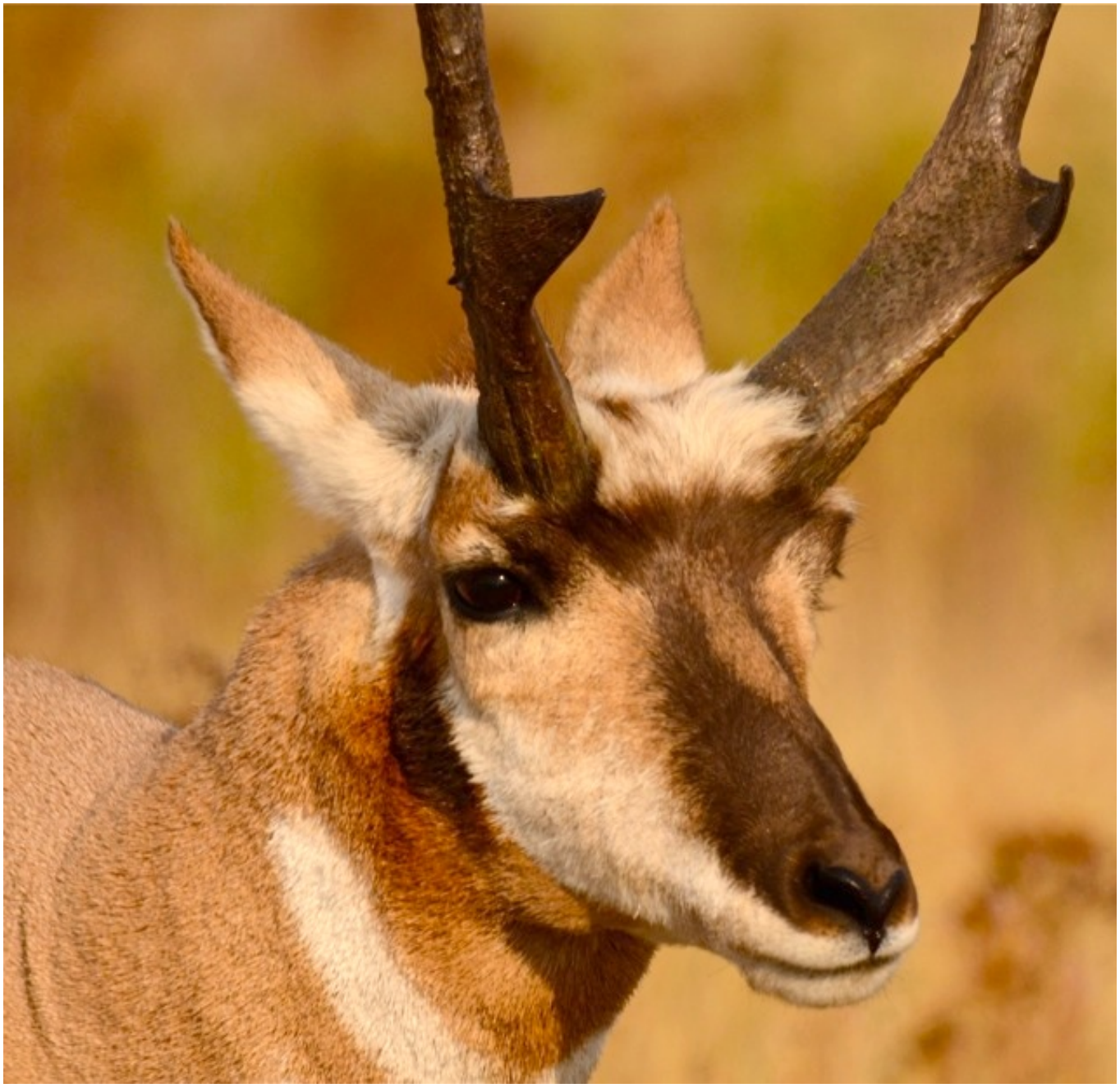
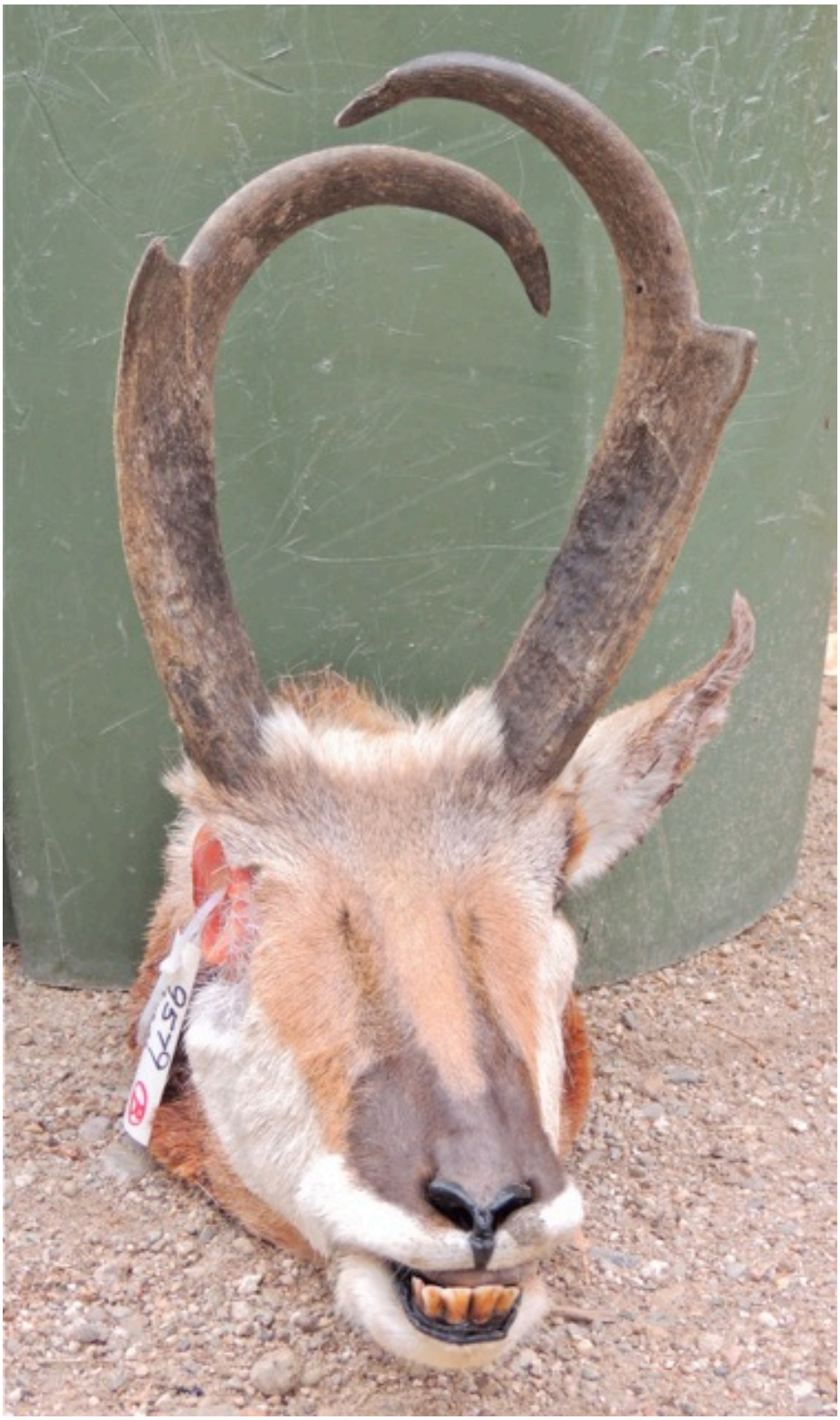
This adult male pronghorn antelope photographed by Donald M Jones in Eastern Montana appears to have a completely normal bite, for comparison with those with underbite. Note that the lower lip is tucked in behind the back of the upper lip as is normal for most ruminant species. Also, the anterior of the muzzle is

squared on the front with the nostrils facing forward as is normal, not angled upward at a 45 degree angle, as they do on a ruminant with brachygnathia superior/underbite/underdeveloped premaxillary bone. The antelope also has normal typical horns.

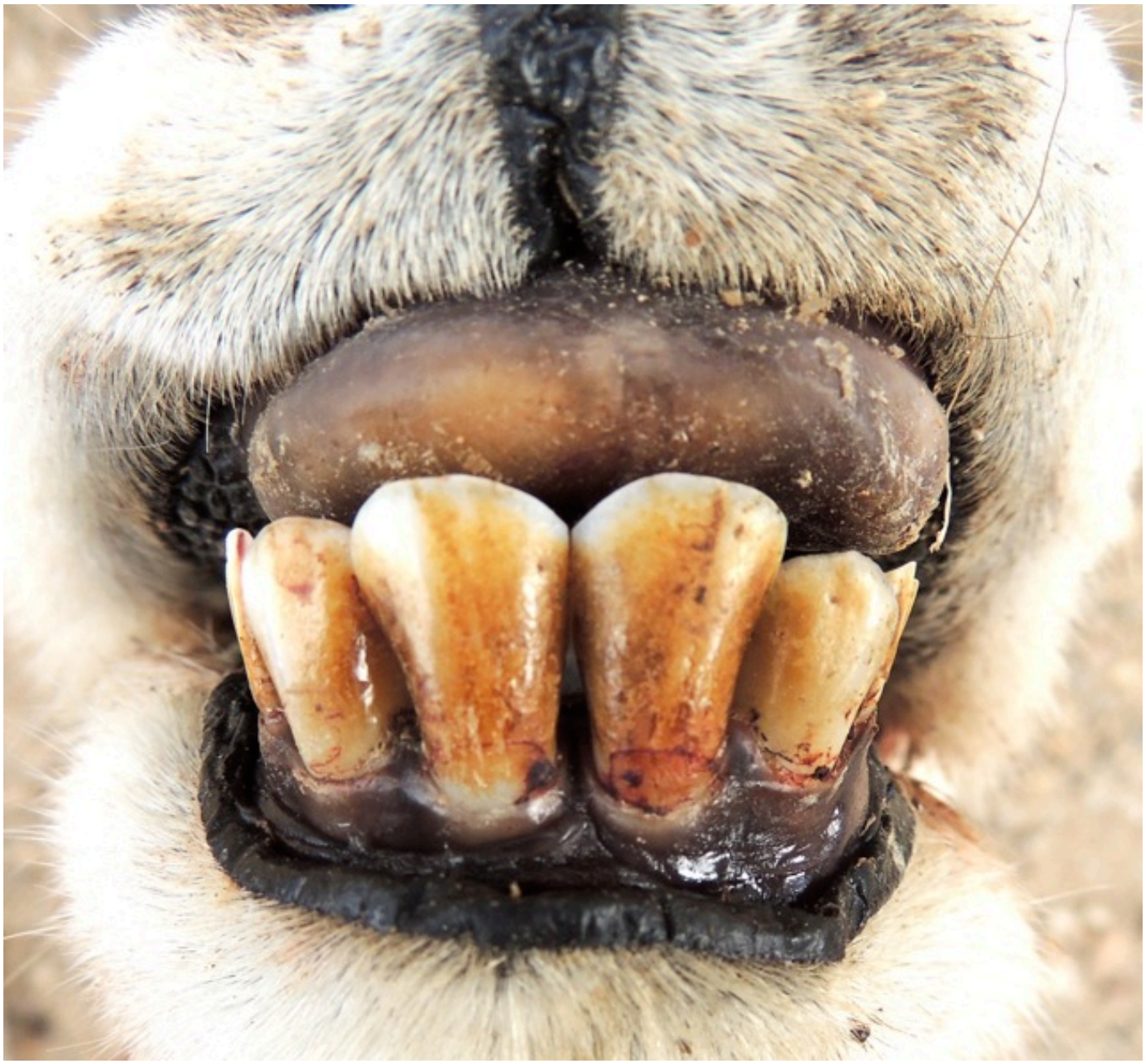
This young pronghorn antelope was photographed on the National Bison Range north of Missoula, MT, in 2011. Note it has malformed, epigenetically changed horns and brachygnathia superior/underbite as evidenced by the front of the lower lip being even or slightly forward of the front of the upper lip.



This adult male antelope photographed at the National Bison Range north of Missoula, MT, in fall 2011, may have a slight underbite. It does not have as bad an underbite as the antelope in the previous photo. The front of the lower lip is at least somewhat behind the upper lip, unlike the antelope above. On an antelope or other ruminant with only a slight underbite, the lips have to be lifted and the bite examined, only possible on a dead animal or an animal that is captured for a study. Note also that this antelope's horns are completely normal in shape.

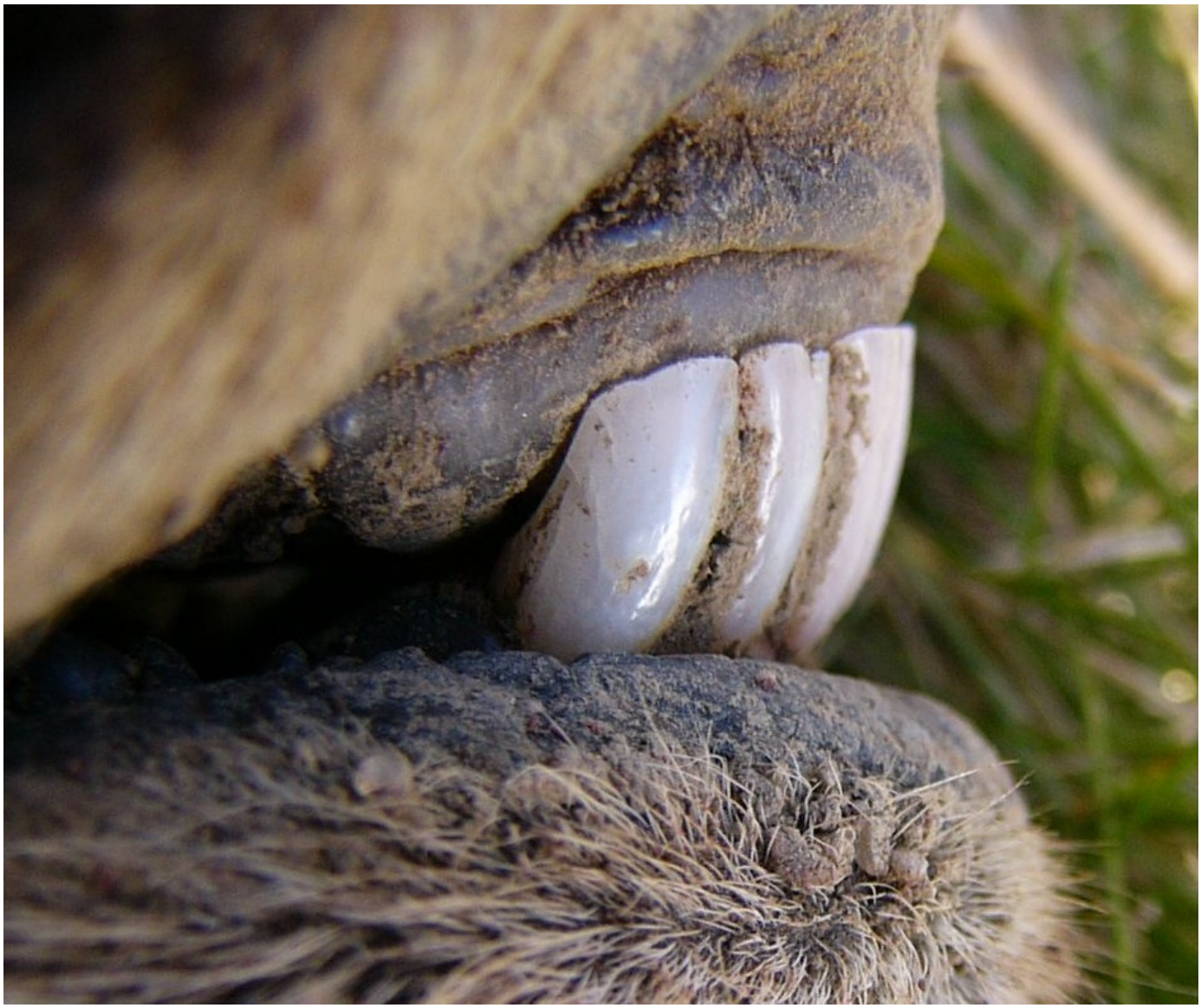


This hunter-killed male pronghorn antelope has a normal bite, with the lower incisors contacting the dental pad. It does have atypical horns.

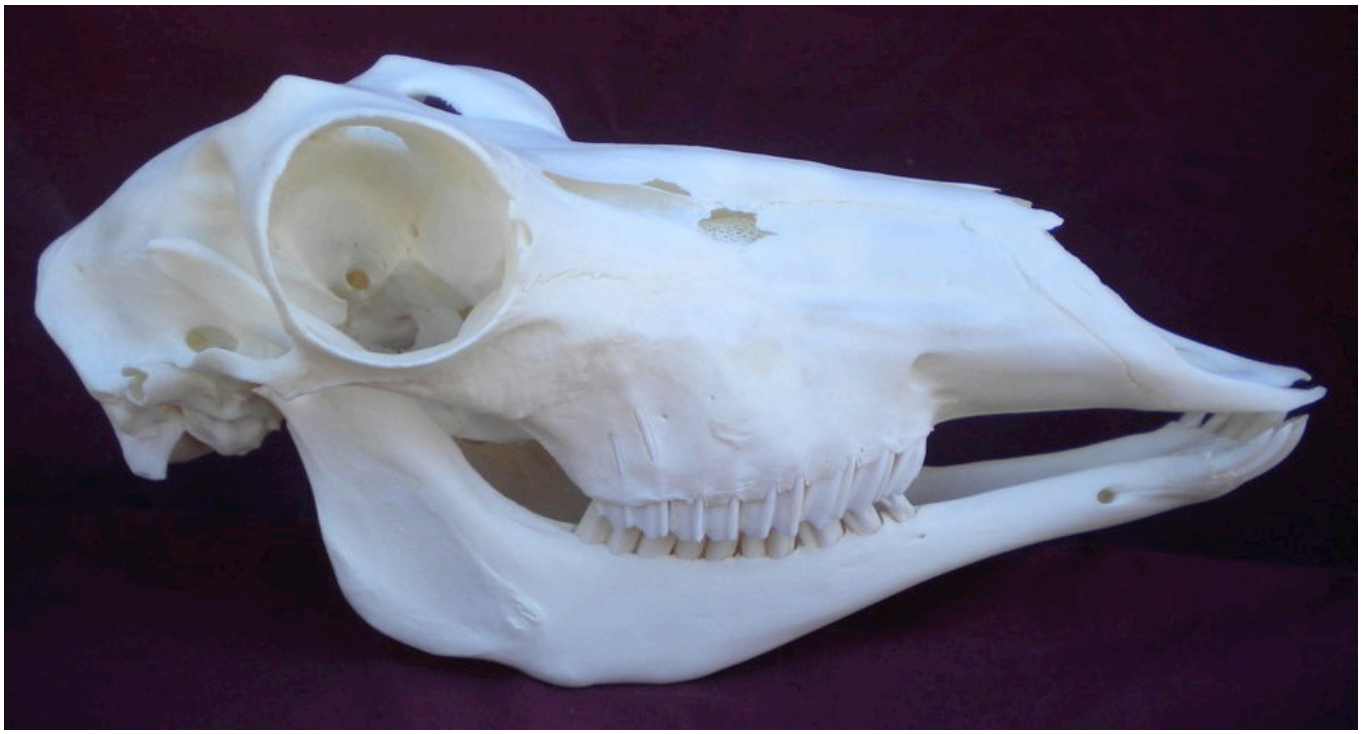


This is a close up view of the mouth of the above male antelope on page 4. This antelope had a normal bite with all but the #3 and canine incisors completely contacting the pad.

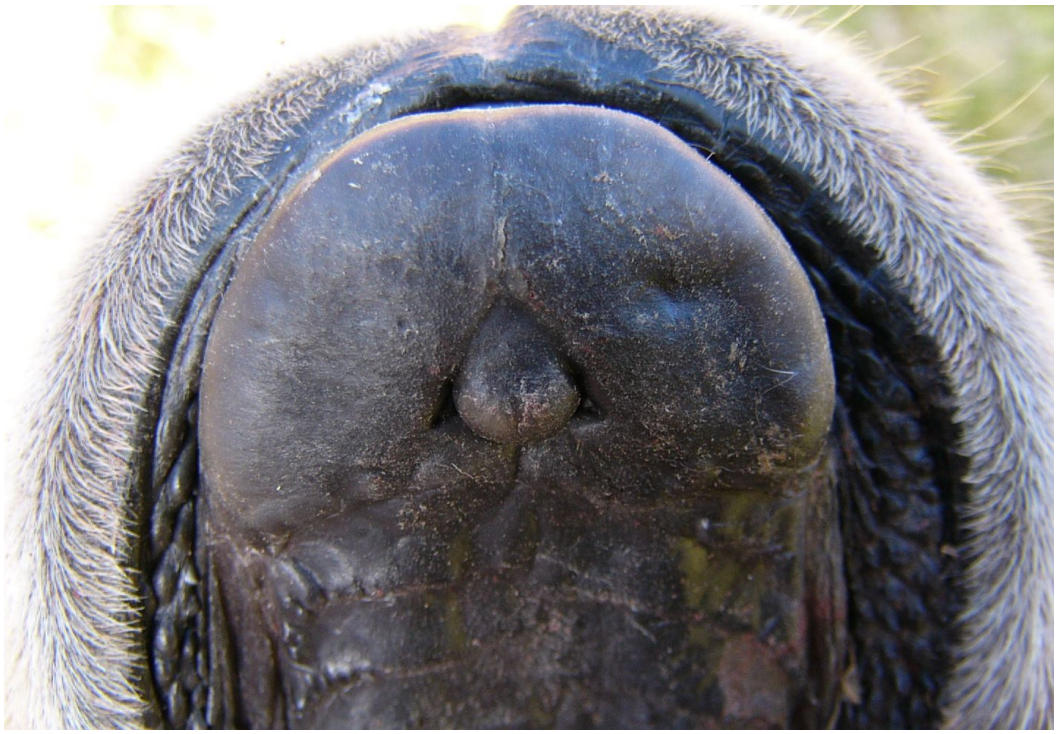
This is an example of an antelope lower jaw from an antelope, which suffered severe bone disintegration of the anterior of the jawbone. The bone around the roots of the lower incisors has disintegrated almost to the point of letting the incisors fall out. If the incisors do fall out, the animal can't get enough to eat and usually dies, especially in the winter months. This animal also had a slight underbite resulting in the very uneven V shaped wear between the two middle incisors and the U shaped areas worn out of the top of incisor #2 and #3. This wear pattern happens because the foliage slides out over the incisors because of the space between top of the lower incisors and the front of the dental pad. This makes it difficult for the animal to get enough nutrition throughout its life and malnutrition is likely at least partly responsible for the bone disintegration around the incisors, compounding the nutrition problem when the incisors fall out.



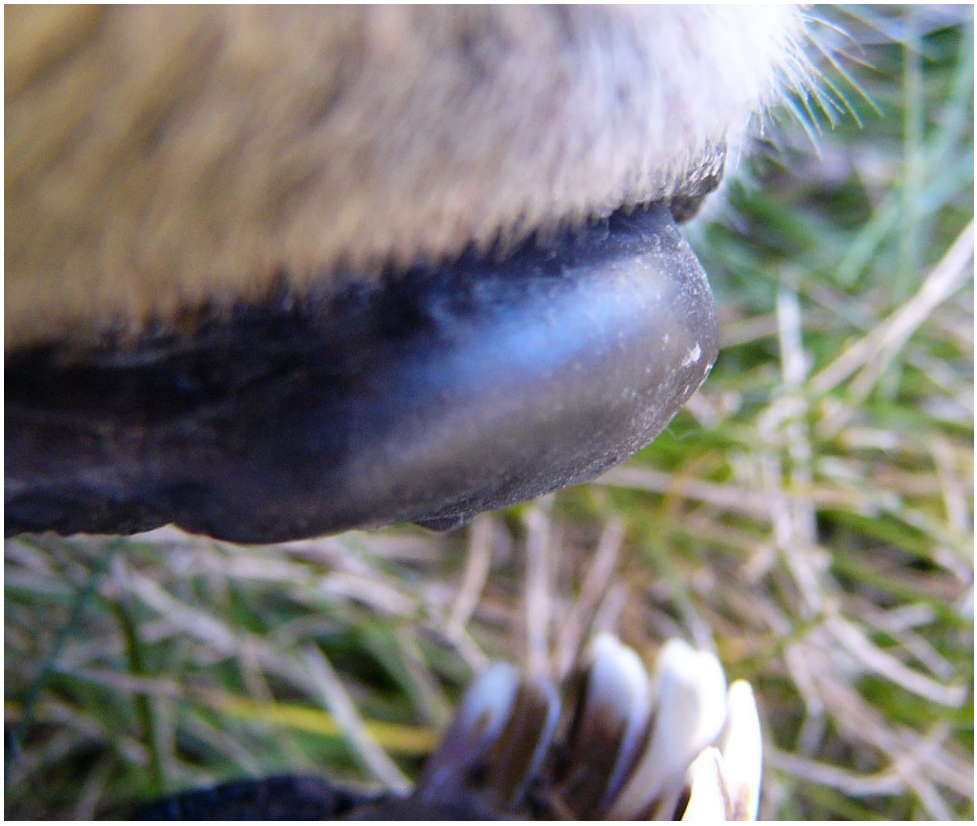
This is a photo of the side view of an adult hunter-killed antelope showing a normal bite, with all of the incisors contacting the dental pad and with even wear on the tops of the incisors.



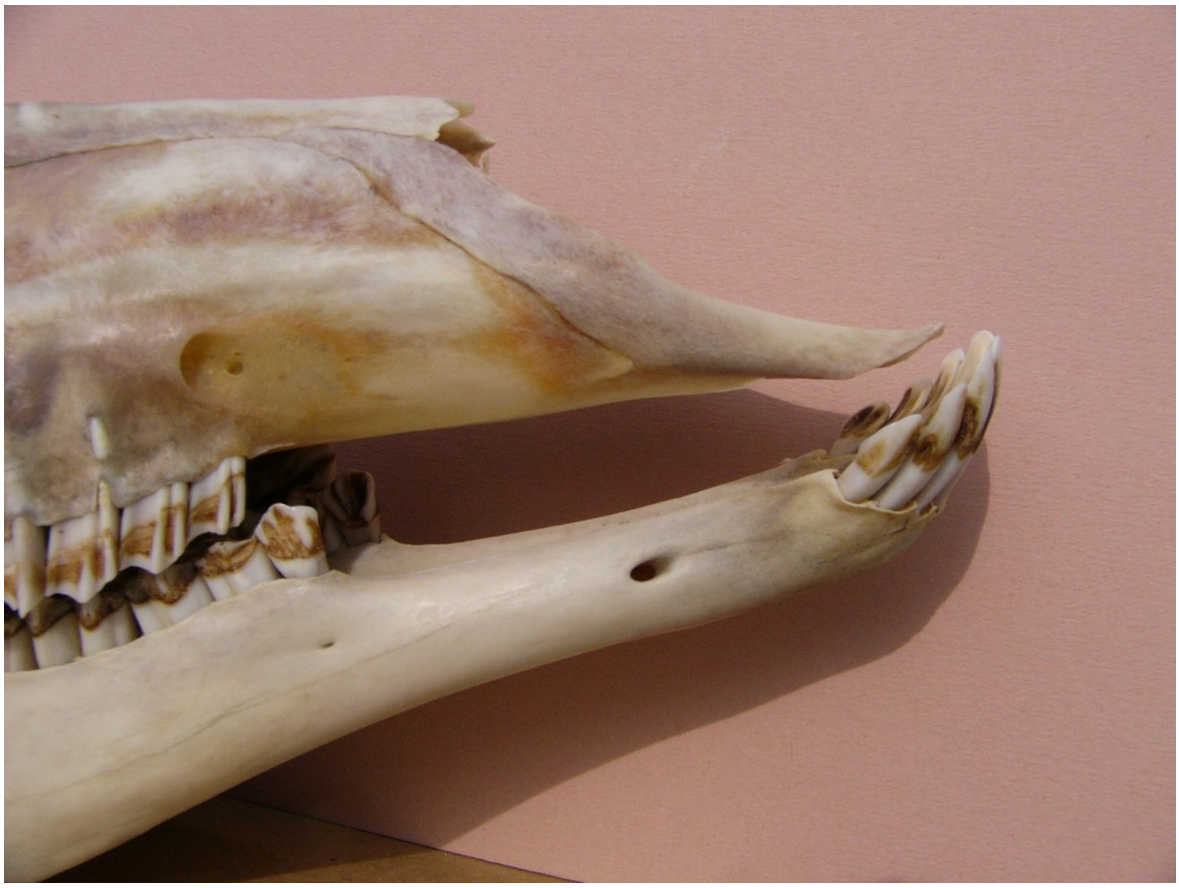
This is a cleaned doe antelope skull with a normally developed premaxillary bone and a normal bite. Note that when the molars are meshed on this normal antelope skull, the lower incisors contact the anterior of the premaxillary bone and are not at all forward of the premaxillary bone. This photo was found on the internet.



This is a close-up of a pronghorn antelope's premaxillary pad to show that they are quite different from the premaxillary pads of cervid species, being much thicker than those of deer species.

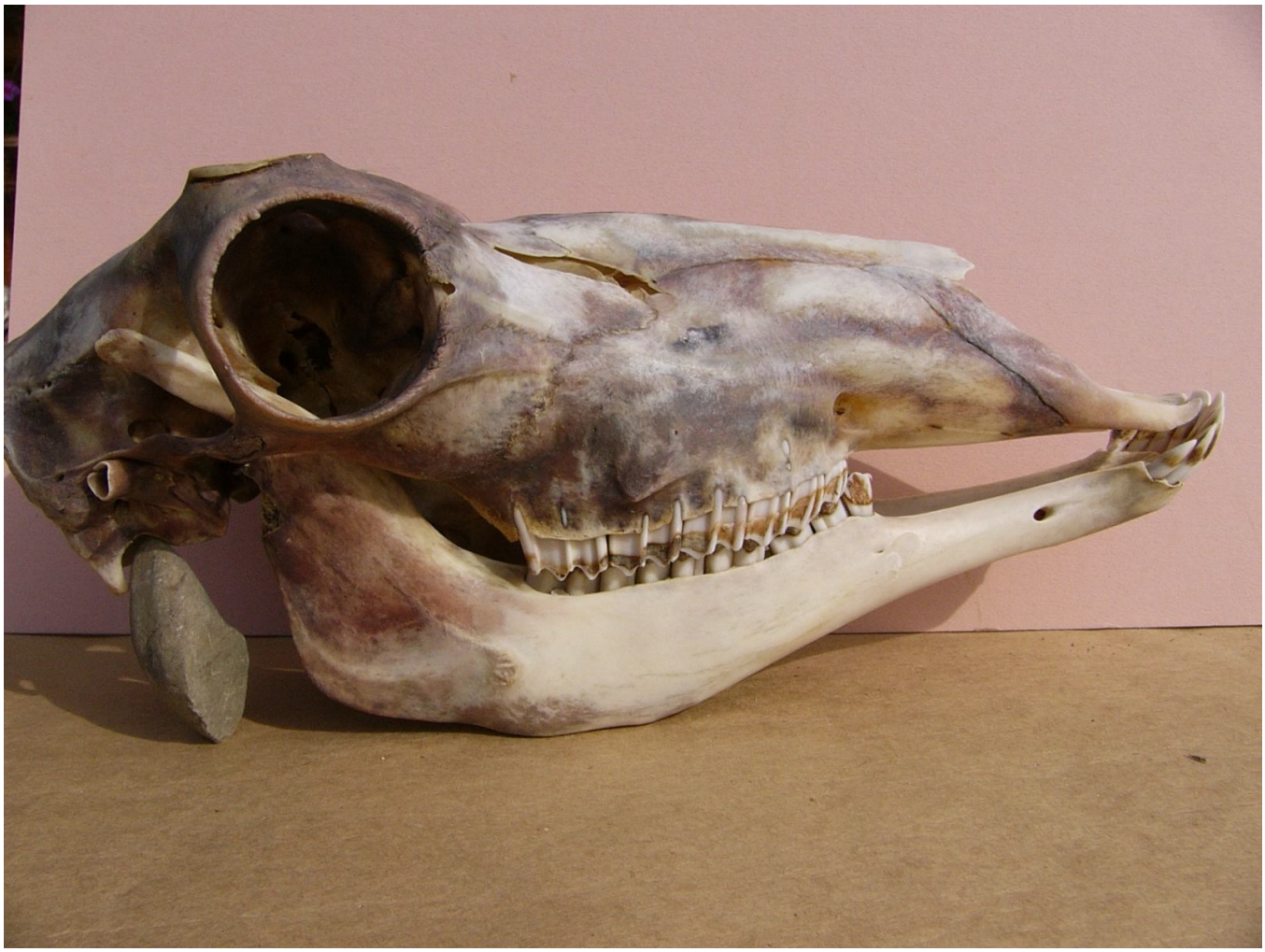


This is a side view of a pronghorn antelope premaxillary pad.



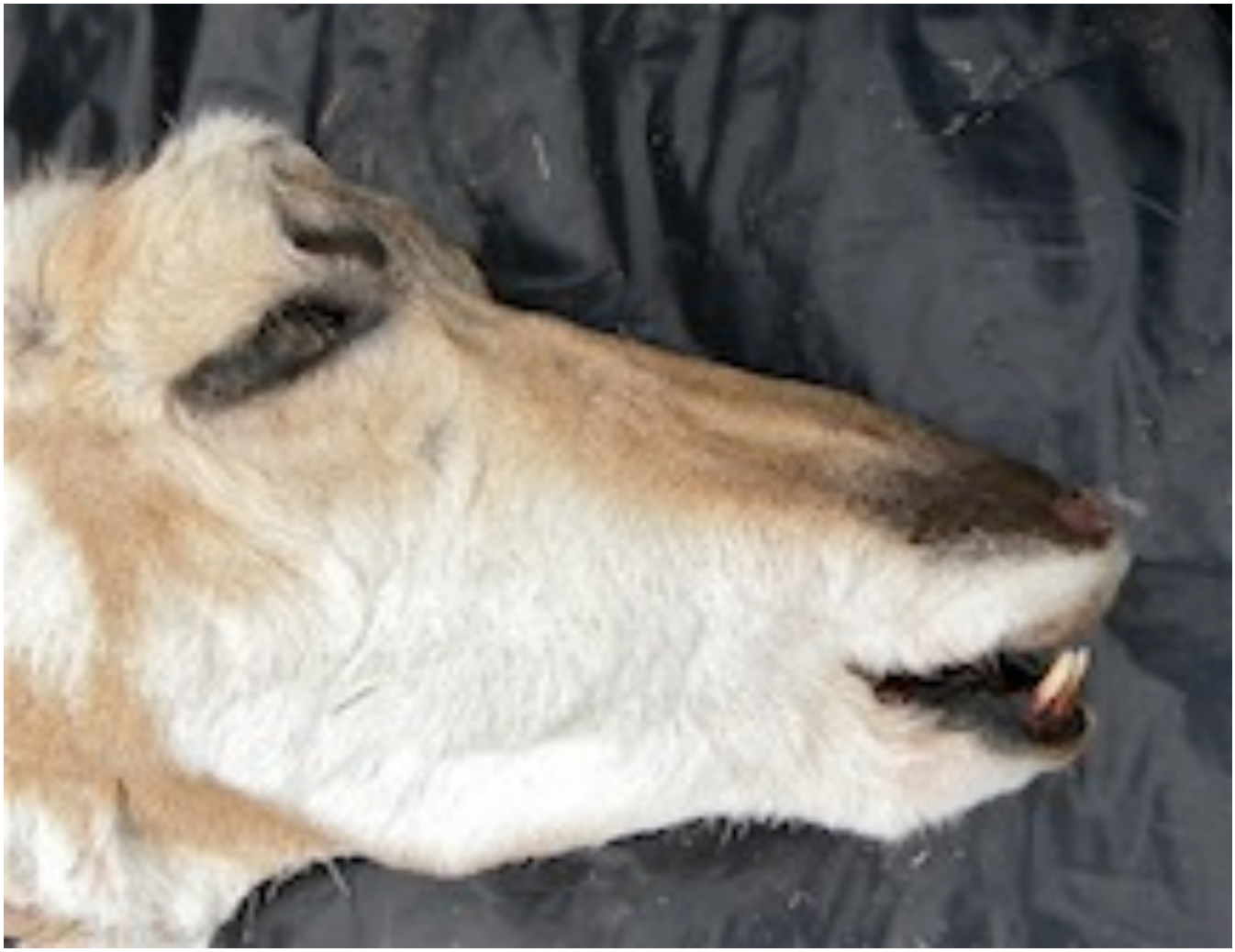
This is anterior portion of the cleaned skull of a hunter-killed adult male pronghorn antelope from Eastern Montana, showing the underdeveloped premaxillary bone, both short and narrow, resulting in a fairly severe underbite. Note on this antelope, the lower incisors are far forward of the anterior of the premaxillary bone, unlike the incisors on the skull on page 8, on which the incisors contact the anterior of the premaxillary bone.

This is the top view of the underbite on the cleaned skull in the previous photo. Note how much wider the incisors are than the underdeveloped premaxillary bone.

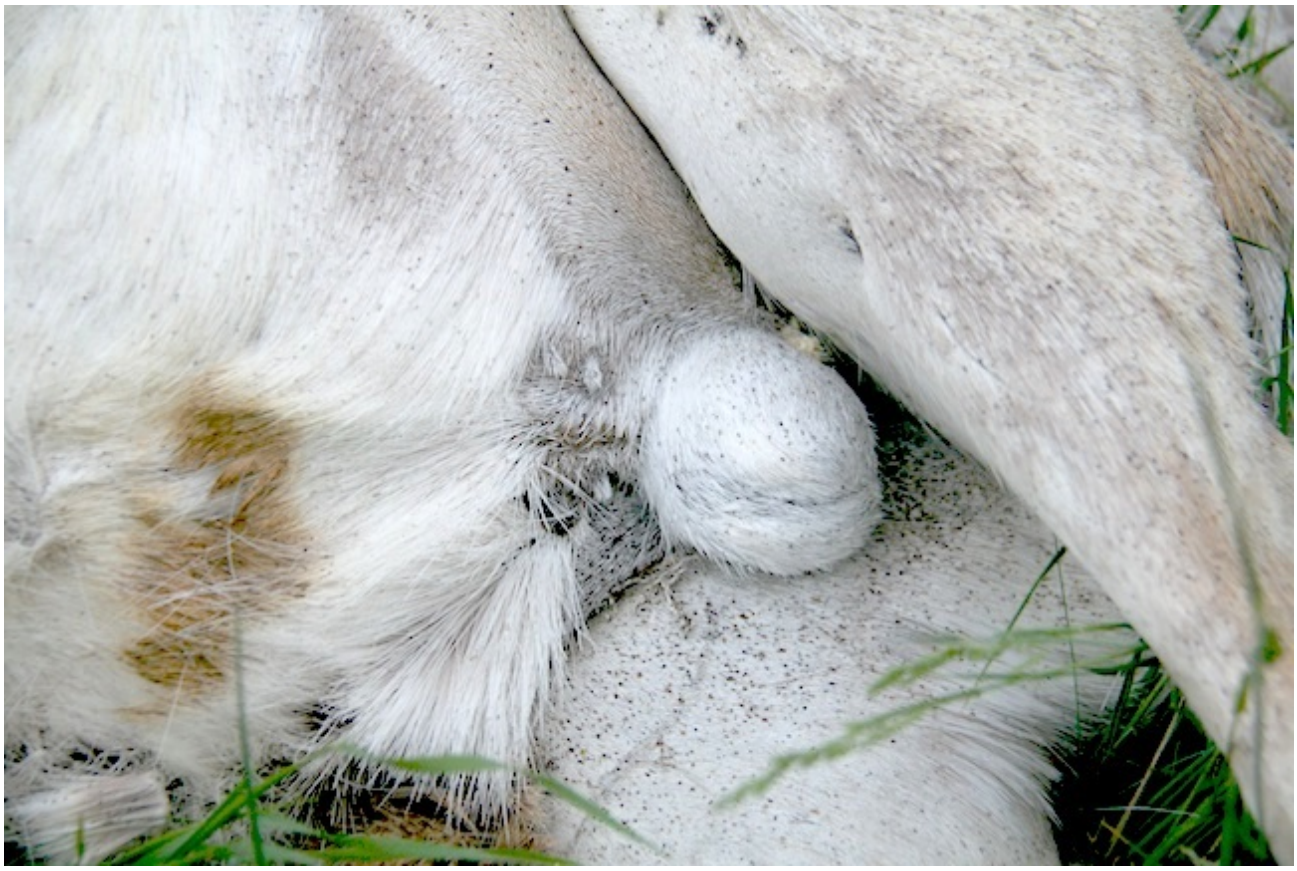


This is the whole cleaned skull of the same hunter-killed male antelope shown in the close-up photos on page 10 and 11. On this skull, the molars are meshed, similar to the cleaned doe skull on page 8. However, on this antelope the lower incisors are completely encircling the anterior of the premaxillary bone, rather than contacting it at any point.

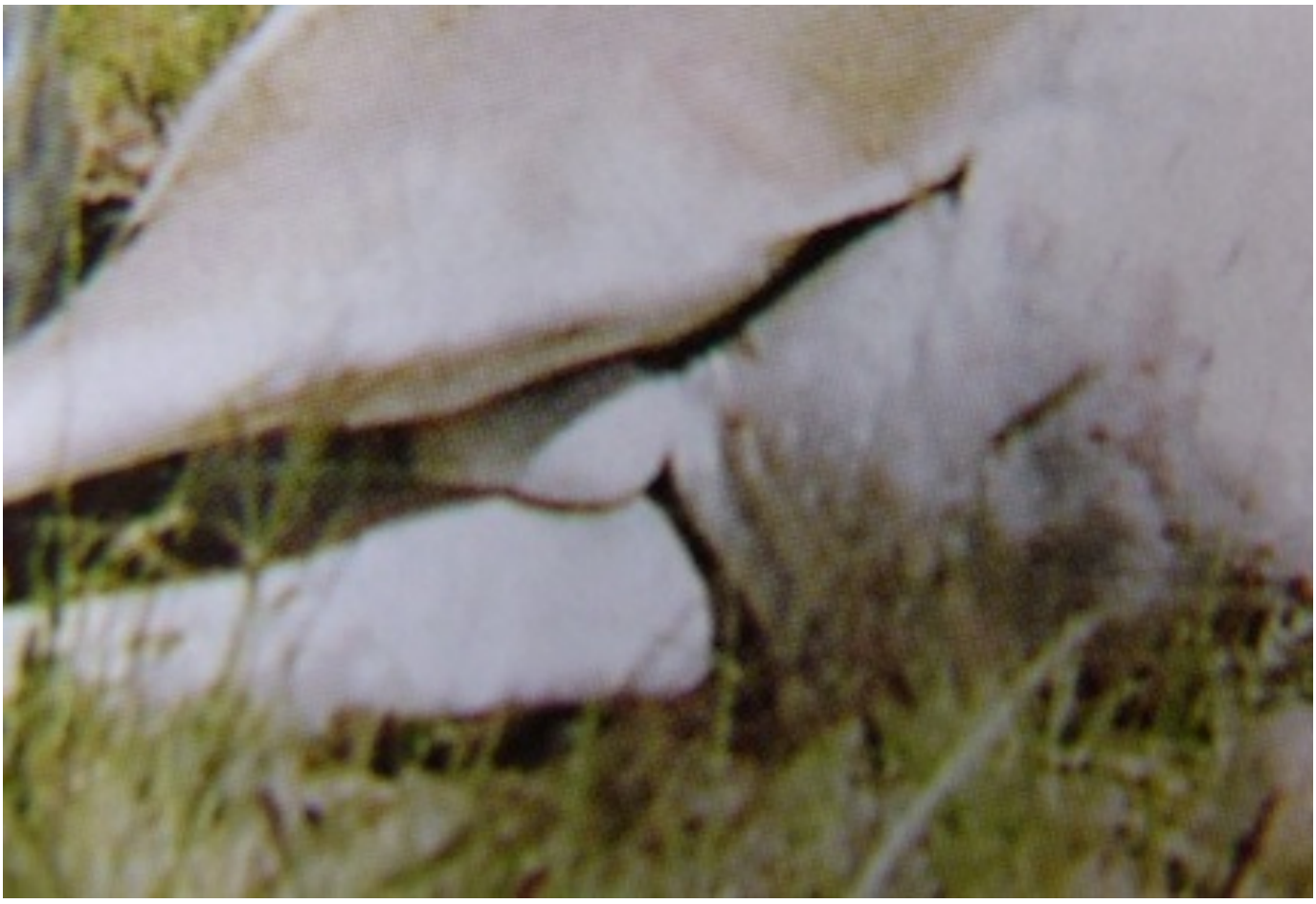
Underbite like this antelope has is caused by a deficiency of the mineral Manganese during fetal development, as well as disruption of uptake of Calcium by the growing fetal cells. These mineral deficiencies are now very wide spread in ruminant populations, and are resulting in a high prevalence of underbite and overbite in grazing animals all over the world. The most likely reason for this is the extremely high use of Glyphosate on GMO crops. Glyphosate chelates seven minerals in the plants on which it lands or if it is in the soil or water the plants grow in. Glyphosate also chelates those seven minerals in the animals that eat the mineral deficient plants, causing a severe deficiency of those minerals in the pregnant mother animals, resulting in birth defects in their young. Glyphosate travels on moist weather fronts and is deposited on all plants and in surface water everywhere, thus exposing all grazing animals to the mineral chelating effects on the plants and on the animals themselves.



This photo shows brachygathia superior on a hunter-killed antelope with the soft tissue and skin still present for comparison with the cleaned skull in the photo on page 12.



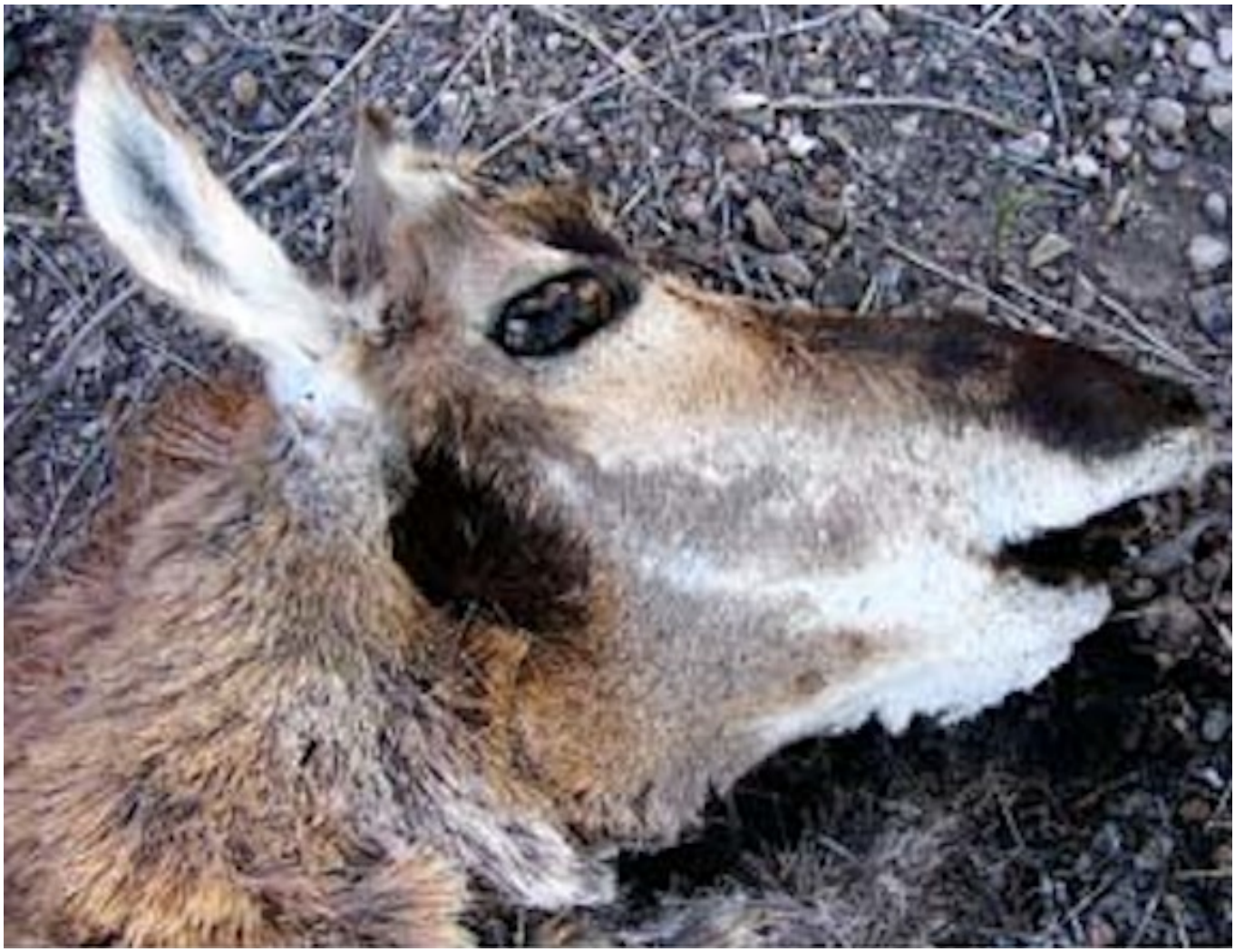
This adult male antelope has a normal length scrotum with bilateral hemiscrota (side by side and perpendicular to the spine). This is the scrotal configuration most male mammals had for millions of years until spring of 1995, when many male mammals began being born with a epigenetic birth defect resulting in short scrotum, no scrotum formed at all or most commonly the left hemiscrota and testis formed directly forward of the right hemiscrota and testis. Animals like deer, which have a penis sheath on the external skin directly forward of the scrotum, also have much shorter penis sheath than normal. However, as can be seen in the photo above, antelope have an opening in the skin from which the tip of the penis projects. They do not have a penis sheath on the skin like deer.



This antelope photo was of a hunter-killed buck antelope shot in New Mexico. The scrotum is normal in length, but the left hemiscrota is directly forward of the right hemiscrota so this scrotum doesn't look at all like the normal scrotum on page 12. This epigenetic change in scrotal configuration is the result of the left inguinal lymph node and spermatic cord being formed forward of normal prior to the testes descending on the male fetus to form the two hemiscrota (scrotum) in the maliaeable fetal skin early in development.

This adult male antelope had both a malformed scrotum and a severe overbite. It was killed by a vehicle in Nevada, where it was examined and photographed. The scrotum is very short and the left hemiscrota is clearly directly forward of the right hemiscrota. The testes were ectopic and horizontal under the skin between the skin and the body wall. The flap of skin comprising the scrotum was empty. Although one male in New Mexico and one male in Nevada do not indicate a prevalence, it does indicate the misalignment of the hemiscrota birth defect is now wide-spread and may have fairly high prevalence on male pronghorn antelope. Anterior is to the right in the photo of the scrotum above.

A deficiency of the mineral Zinc is what causes short genitalia to be formed on male fetuses. Not likely a coincidence, Zinc is one of the seven minerals that are chelated in the plants and in the animal by exposure to Glyphosate/Roundup. Besides Calcium, Manganese and Zinc, Glyphosate chelates Copper, Nickel, Iron, and Magnesium. Since there is 100 to 1,000 times more free glyphosate in the plants than unbound mineral ions (i.e., "trace nutrients"), the chelation reduces the availability of essential mineral nutrients, including calcium and magnesium which are essential to alular functions and especially to bone development, and iron, which is of course essential to produce photosynthetic pigments in plants (and red blood cells in animals). Glyphosate weakens plants by limiting the availability of those nutrients, thereby opening the door to infection by pathogens, which healthy versions of the plants would normally resist (Johal & Huber, 2009; Huber, 2010). It has been reported in many studies and reviews to similarly affect animals, making them susceptible to infections and parasites.



The Nevada vehicle-killed antelope also had a very severely underdeveloped lower jaw. This was the only antelope we found to examine in Nevada and it had two serious birth defects. This strongly indicates antelope biologists should look closely at hunter-killed pronghorn antelope in their state to determine if these birth defects are present and if so, determine the prevalence. Most importantly researchers need to do tests to find the cause, because not being able to get enough nutrition can cause high mortality in winter and population declines.

This adult male antelope was photographed on May 31, 2014 at the National Bison Range north of Missoula, MT. This antelope has a short upper face (premaxillary bone) resulting in an obvious underbite. The lower lip on an antelope with normal facial structure and a normal bite tucks in behind the back of the upper lip (see the facial structure of the antelope on page 1). The lower lip on this animal is significantly forward of the front of the upper lip.