

## ODFW Wolf Depredation Investigation Summary

**Date:** January 7, 2012

**County:** Wallowa

**General Area:** Kinney Lake area (private land)

**Situation:** A livestock producer found a dead yearling heifer in a small feeding pasture on 1/7/12 at 5:20AM. The remaining cattle in the pasture were agitated and wolf tracks were observed. Wolves were suspected and ODFW examined the heifer early the same morning.

**ODFW findings:** Confirmed wolf

**Evidence of wolf presence in the area?** Multiple wolf tracks were observed in snow around the carcass indicating several wolves were present. In addition, data from the GPS collared wolf (OR4) showed this wolf to have been located 200 yards east of the dead cow at 5:00 am on the same morning. This clearly shows that the Imnaha pack was present at the site of the investigation.

**Summary of evidence:** This animal showed clear evidence of attack. A very high number of pre-mortem bite wounds were observed on the hind end of the cow and most were between the tail and hocks of both legs. Canine tooth bite marks on left flank which could be measured showed 1 1/2" spacing. Pre-mortem bites were also located just behind the front left shoulder. Evidence of multiple wolves present at the time the animal was attacked, the location of bites, and the high number of bites with subcutaneous hemorrhage and tissue damage clearly showed that the cow died as a result of wolf predation.

## ODFW Wolf Depredation Investigation Summary

**Date:** 1/10/12

**County:** Wallowa

**General Area:** Grouse Creek (private land)

**Situation:** A mature bull with injuries was brought from rangeland in the Grouse Creek drainage on 1/8/12. The producer observed injuries below the tail on both hind legs of the bull. Wolves were suspected and ODFW was called and examined the live animal on 1/10/12.

**ODFW findings:** Probable Wolf

### **Evidence of wolf presence in the area?**

Radio-collar data showed that wolf OR-4 was in the same general area of the bull on 12/8, 12/9, 12/11, 12/14, 12/17, and 12/18/2011.

### **Summary of evidence:**

There was no scene to investigate, the bull was brought to the ranch stockyard and examined. The bull was alive and appeared otherwise healthy with no sign of limping. The injuries were mostly healed and estimated to be 2-4 weeks old. There was a minimum of 7 vertical and horizontal cuts (1 - 4 inches long, 2/16-3/16 inch diameter) on the skin of left hind leg between the hock and tail that appeared to be the result of bites. There was a minimum of 6 mostly vertical cuts (2 - 4 inches long, 2/16-3/16 inch diameter) in the skin of right hind leg between the hock and tail that appeared to be the result of bites. However, the healing of the injuries made it difficult to confirm the cause. The injuries appeared to be the result of canine teeth and were in body locations characteristic of wolf attack. Imnaha pack wolves were known to be in the area during the month of December and were involved with 2 ODFW confirmed cattle depredations during the estimated time the bull received its injuries. Though we cannot be certain of the source of these wounds, the nature and location of the wounds do indicate the possibility of predation and, combined with evidence of wolf presence and a history of recent depredations of livestock in the area, a determination of probable is warranted.

## ODFW Wolf Depredation Investigation Summary

**Date:** 1/10/12

**County:** Wallowa

**General Area:** Grouse Creek (private land)

**Situation:** On approximately 12/15/11 a sick adult cow was discovered on private land in the Grouse Creek drainage. The cow was observed to be weak, not eating normal amounts, and not wanting to get up. It was treated with antibiotics but the cow continued to lose weight and decline in body condition. The owner euthanized cow on 1/09/12 and at that time a variety of exterior injuries to the cow were observed. Wolves were suspected as a possible cause of the injuries and ODFW examined the carcass on 1/10/12.

**ODFW findings:** Possible Wolf/Unknown

**Evidence of wolf presence in the area:** Radio-collar data showed that wolf OR-4 was in the same general area of the cow on 12/8, 12/9, 12/11, 12/14/2011. In addition, two confirmed wolf depredations occurred in the Grouse Creek drainage less than 1.5 miles from where cow was being pastured, on December 11 and 14, 2011.

**Summary of evidence:** Several sores were observed on the skin of the right hip (2 x 3 inch diameter), the upper right rear leg (1 x 2.5 inches diameter), the right rear leg (1.5 inch diameter), above the right-side ribs (1 inch diameter), and on the left hip (2 x 2 inch diameter). All of these sores appeared to be result of the cow lying down for long periods of time. Four scrapes (1/4 - 3/8 inch diameter) were observed on the hide of the right front leg between the ankle and knee. There was no matching hemorrhage observed under the scrapes or in the associated muscle tissue. The scrapes appear to be the result of contact with a hard object. Nine circular marks were observed under the skin covering the right rib cage ranging from 1/4 - 1/2 inch in diameter with some sign of associated hemorrhage. These could possibly be a result of bites or contact with a pointed object. Matching tissue under the marks/skin showed yellow liquid in surface tissue over the muscle indicating possible healing from injury. No bruising or hemorrhage was observed on the associated rib muscles.

The sores on the skin of the cow appeared to be the result of continual lying on the ground. The marks under the skin covering the right rib cage are possible canine bites, but this is difficult to confirm due to age of wounds. It is unknown if the observed wounds or other unknown factors caused the cow to become sick and decline in body condition.

## ODFW Wolf Depredation Investigation Summary

**Date:** 01/14/12

**County:** Wallowa

**General Area:** Deadhorse Ridge (private land)

**Situation:** On the afternoon of 1/13/12 the carcass remains of a mule were found on private rangeland east of Joseph, OR. Wolves were suspected and ODFW examined the carcass early the following morning. Some portions (legs) of the carcass were frozen during the initial investigation. They were later thawed and then examined on 1/16/12.

**ODFW findings:** Probable Wolf

**Evidence of wolf presence in the area?** Wolf tracks were observed in the snow near the carcass. Data from the collared wolf OR4 showed that he was located 3.0 miles northeast of the investigation site on 01/09/12 and 01/10/12. He was also located 1 mile west of site on 01/13/12.

**Summary of evidence:** The carcass was mostly consumed and there was clear evidence of feeding by coyotes, wolves, ravens, and eagles. A blood stain in the grass near the carcass suggested that the mule was bleeding at or near the time of death. Two bite marks with 1½” spacing on the limited remaining lower leg tissues showed some evidence of pre-mortem bites (bruising on underlying tissue) and that wolves were present at or near the time of death. These bites do not show the cause of death of the mule. However, they do suggest the possibility of predation and, combined with evidence of wolf presence and a history of recent depredations of livestock in the area, a determination of probable is warranted.

## ODFW Wolf Depredation Investigation Summary

**Date:** 2/26/12

**County:** Baker

**General Area:** Keating Valley

**Situation:** A livestock producer found a dead calf on 2/26/2012 at 6am. Wolves were suspected and ODFW examined the calf the same morning.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** There was no evidence of wolves at the site or in the vicinity.

**Summary of evidence:** There was no evidence of a chase or struggle at the scene. There was no sign of distress of remaining livestock in the pasture where the calf died. Some feeding was observed on the hind end of the animal which was determined to be post-mortem. A coyote track was observed near the carcass. There was no sign of predation – upon skinning the head of the calf it was found that the calf had suffered a broken skull which was the likely cause of death.

## ODFW Wolf Depredation Investigation Summary

**Date:** 3/8/12

**County:** Wallowa

**General Area:** Threebuck Creek (private land)

**Situation:** While checking cattle a livestock producer found several injured adult cows on the morning of 3/8/2012. Wolves were suspected and the injured cattle were gathered and brought into a holding pen for further examination. ODFW examined the cattle the same day.

**ODFW findings:** Confirmed wolf (three)

**Evidence of wolf presence in the area?** Unknown. The Threebuck Canyon area is regularly used by Imnaha Pack wolves. The injuries were estimated to be two to five days old and it is unknown exactly where the cattle were at the time injuries were sustained.

**Summary of evidence:** As a result of the severity of injury, one of the three injured cows was euthanized by a veterinarian at the time of the investigation. The other two injured cows were immobilized and examined while alive. All three cows had multiple bite wounds, primarily on the hind end. The dead cow had puncture holes on its hind end (above udder) with spacing and location consistent with wolf bites. This same area and the area of the left flank also had hundreds of bite wounds which varied in width from one-eighth inch to one quarter inch each. The wounds are consistent with wolf bites, based on size, location, and the large number of bites. This depredation was confirmed based on physical evidence of wolf attack.

The remaining two live cows showed similar wounds as the dead cow, though less severe. One had multiple bite wounds on its right hind leg above the hock which appeared similar to the bite marks on the dead cow. The other showed bite marks on the base of tail and wounds near the anus which appears to be a result of bites. The location and nature of these wounds is consistent with a wolf. Similar wounds were observed on the front left leg and brisket. In addition this animal showed a number of scraped areas (left hip and lower right leg) and though they may not be bite-caused, they did appear to be injuries sustained at the same time as the other injuries observed. One of the live cows had recently calved and the calf is missing. Confirmation of depredation is made on these two live cows based on the similarity of wounds (though less severe), and the knowledge that all three cows were in the same area at the time the injuries were sustained.

## ODFW Wolf Depredation Investigation Summary

**Date:** 5/12/12

**County:** Umatilla

**General Area:** Weston Mountain area

**Situation:** A private landowner in the Weston Mountain area found a dead adult ram sheep in a small pen near their house on the morning of May 12, 2012. Three other rams in the pen showed signs of attack and severe injury. One of the injured sheep was euthanized as a result of its injuries. Due to previous wolf depredation of sheep in the area wolves were suspected and ODFW examined the sheep the same day.

**ODFW findings:** Confirmed wolf

**Evidence of wolf presence in the area?** On May 2, a wolf depredation occurred approximately 6 miles away. In addition, ODFW has been tracking a single wolf in the general area only a few miles of this incident. On the morning of the investigation a set of wolf tracks was observed approx. 120 meters from the sheep pen. This combination of information is evidence that at least one wolf was in the area at the time of this event.

**Summary of evidence:** Two sheep were necropsied and found to have significant premortem injuries associated with bite marks. The large number of bites made measurement of individual bites difficult, but were clearly large carnivore bites. Bites were found on the necropsied sheep in the following areas; hind end, flanks, over the back, sternum, and neck. All bites caused massive subdermal hemorrhage and trauma to the underlying muscle tissues. The extent of bite damage, and the size and location of bites on the sheep was nearly identical to the May 2, 2012 depredation event in the area. Wolf depredation was confirmed based on clear physical evidence of wolf attack. The two remaining injured sheep were examined externally and were confirmed to have been attacked during the same depredation event.

Note: On May 16, one of the two remaining injured sheep died as a result of injuries sustained on the May 12 depredation event. The loss total is now three, with one injured sheep.

## ODFW Wolf Depredation Investigation Summary

**Date:** 5/2/12

**County:** Umatilla

**General Area:** Weston Mountain area

**Situation:** A private landowner found four dead sheep (two ewes, two lambs) in a small pen near her house on the morning of May 2, 2012. The property is a forested tract in the Weston Mountain area. Large canid tracks were observed and wolf depredation was suspected. One lamb was also reported to be missing. ODFW examined the sheep the same morning.

**ODFW findings:** Confirmed wolf

**Evidence of wolf presence in the area?** A single set of wolf tracks was observed (in snow) travelling to and from the sheep pen area. One wolf track was observed inside the pen.

**Summary of evidence:** Three of the four dead sheep (two large ewes and one lamb) were necropsied and examined on-site. All three showed numerous large pre-mortem bites with associated internal damage. The lamb showed clear wolf bites over its back, and while they did not break through the hide, they caused massive internal trauma. Both ewes showed a nearly identical attack pattern – numerous pre-mortem bites on the hind end, upper flank, and neck. Few bites penetrated the hide but still caused severe muscle trauma and hemorrhage underneath. The wounds are consistent with wolf bites based on size, spacing, location, and the large number of bites. Wolf depredation was confirmed based on clear physical evidence of wolf attack and evidence of wolf presence inside the pen. Though the fourth animal (lamb) was not necropsied, we confirmed it to be depredated during the same event. The missing lamb is also presumed to be a result of the same depredation event.



## ODFW Wolf Depredation Investigation Summary

**Date:** 5/24/12

**County:** Wallowa

**General Area:** Zumwalt Road

**Situation:** On the afternoon of 5/24/12, while driving along the Zumwalt Road, a local rancher reported observing a single dark colored wolf chasing two horses in a roadside pasture. When he approached, the wolf ran off and the two horses were near the house buildings. The rancher contacted the owner of the horses and informed him of the observation. The horse owner was concerned of injury to one of the horses and ODFW looked at the animal the following morning.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No tracks or other sign of wolves was found at the scene of the horses. However, over the past two years this area has had a number of cattle depredations by the Imnaha Pack and wolves from this pack have been documented in the area of the horse pasture. No radio-collared wolves were observed to be in the area at the time of the reported chase.

**Summary of evidence:** On the morning of the investigation (approximately 13 hours after the observed chase) the horse in question appeared to be fine and had been saddled for the purpose of working cattle. The horse showed a minor scrape on its right hip, but no serious injury. The scrape appeared to be superficial only and had no broken skin and there was no evidence of swelling or fluid under the scrape. The cause of the minor scrape is unknown.

## ODFW Wolf Depredation Investigation Summary

**Date:** 5/27/12

**County:** Umatilla

**General Area:** Bear Creek area, South of Pilot Rock, OR

**Situation:** On May 27, 2012 the remains of a calf were found in a pasture on Bear Creek in South Umatilla County. Coyotes were observed at the site of the carcass and ODFW was asked to evaluate the carcass for possible wolf depredation. The scene was initially investigated by Wildlife Services personnel and though no sign of wolves was observed, the carcass remains were brought to Pendleton ODFW and placed in a cooler for later inspection.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No wolf sign was found at or near the carcass. Within the past two years wolf tracks have been noted in an area approximately 4 miles from this site. However, no resident wolf activity in this area is known at this time.

**Summary of evidence:** The lack of significant decomposition indicated that the calf had died a day or less prior. Feeding on the carcass by coyotes and scavenging birds was observed and was also evident on the carcass remains. No sign of predation was noted at the initial scene of the carcass and only coyote tracks were observed as reported by Wildlife Services personnel. The calf was estimated to have weighed approximately 175 lbs when alive. However, the remaining carcass was only about 50 lbs when examined. Overall the carcass showed signs of heavy feeding. The carcass was found laying on its right side and nearly the entire left (up) side soft tissue of the animal was missing except for the head, neck, left front fore leg, and some loose skin. All viscera and internal organs were completely gone. ODFW skinned the remaining portions of the calf and examined the underlying tissues for bite marks and any pre-mortem wounds. All skinned areas had undamaged muscle tissue with normal tissue color and no pre-mortem wounds were observed. Paired tooth marks were observed on the thin bone of the upper left scapula but were clearly post-mortem and were approximately 1 inch apart. Except for some limited portions of floating rib bone ends, very little bone consumption had occurred even though scavenging had been extensive. ODFW found no evidence of predation of any kind on this calf.

## ODFW Wolf Depredation Investigation Summary

**Date:** 5/31/12

**County:** Wallowa

**General Area:** Crow Creek area, north of Enterprise, OR

**Situation:** On the morning of May 31, 2012 the carcass of a calf was found by the Wallowa County Wildlife Services agent while driving the Crow creek road north of Enterprise. Wolves were suspected and ODFW examined the carcass on the same day.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No wolf sign was found at the scene. The area has been infrequently used over the past two years, primarily during the winter and spring months, by the Imnaha Pack. On May 24<sup>th</sup>, a local stockgrower observed a single wolf chasing horses approximately 4.5 miles from this area.

**Summary of evidence:** Most of the carcass had been consumed including the viscera. A small amount of muscle tissue was present on the upper part of both front legs. The muscle tissue on both hind legs and rib cage had been completely consumed. Neck muscle tissue was present. The right hind leg bone had been removed from pelvis and was laying 6 feet from carcass. The left leg bone was still attached to the pelvis. The rib cage was present with its lower portion of the ribs chewed. We skinned the upper left front leg, right front shoulder, and neck and no hemorrhaging was found. Two small (1/16 inch diameter) scrapes 1/2 inch long, 1 1/2 inches apart were found on the top of the left shoulder and had occurred prior to death. Both lower legs were skinned and no hemorrhage was found. The animal had been mostly consumed by coyotes and there was no evidence of wolf predation.

## ODFW Wolf Depredation Investigation Summary

**Date:** 7/01/12

**County:** Wallowa

**General Area:** Marr Flat

**Situation:** On the morning of 7/1/12, ODFW received a report of a dead cow in a grassland pasture. No other stock was in the pasture. Wolves were suspected and ODFW investigated the same morning.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No tracks or sign of wolves was found at the scene of the dead cow. No GPS-collared wolf locations have occurred at this site in 2012. The area is within the Imnaha Pack homerange. No radio-collared wolf signals were detected in the area at the time of the investigation.

**Summary of evidence:** The carcass was in a natural position and an advanced state of decomposition. No soft tissue remained – only hide, bones, and maggots. Based on this decomposition the cow was estimated to be dead two to three weeks. All bones were present and articulated. The hide was intact except the area around the anus and brisket which appeared to be a result of scavenging. Stomach contents were intact. No evidence of bites or scratches was observed on the hide. Tooth wear on the cow indicated that it was quite old. Only coyote and magpie sign was observed at and around the carcass.

## ODFW Wolf Depredation Investigation Summary

**Date:** 7/26/12

**County:** Wallowa

**General Area:** Grouse Creek/Morgan Butte – Public Land (USFS)

**Situation:** On the evening of 7/26/12, ODFW received a report of an injured calf in a forested area of the Imnaha Pack. The calf was observed in good health early in the afternoon while being herded to a new pasture, but by evening was found severely injured. Wolves were suspected and ODFW investigated the same evening.

**ODFW findings:** Confirmed wolf

**Evidence of wolf presence in the area?** There was no GPS data indicating that OR4 was in the area at the time of depredation. However, this Upper Grouse Creek area has been used by the Imnaha Pack during the summer months.

**Summary of evidence:** The approximately 325 pound calf was still alive at the time of the investigation. Multiple bite marks were observed in the area of right and left rear legs, belly, flank, udder, an anus. Most bites were focused on the soft tissue areas of the inside of the hind legs and flanks and all appeared to be the result of canine teeth. The most significant wound was two relatively deep holes with torn muscle tissue on the right flank. The high number, size, and location of bite wounds are typical of wolf attack. It is unknown if the calf will survive.

## ODFW Wolf Depredation Investigation Summary

**Date:** 8/5/12/12

**County:** Wallowa

**General Area:** Zumwalt Prairie – Private Land

**Situation:** On the morning of 8/5/12 ODFW received a report of a dead calf at a water pond on private land in the Zumwalt prairie area. Wolves were suspected and ODFW investigated the same morning.

**ODFW findings:** Possible/Unknown

**Evidence of wolf presence in the area?** None found upon examination of the carcass or surrounding area. The area has been used in the past by wolves, though primarily during winter and spring months. There was no radio collar data indicating that Imnaha Pack wolves were in the area.

**Summary of evidence:** The carcass scene had been modified by other investigators prior to ODFW arrival and the carcass of the calf was reported to have been in the water of the pond. The calf was estimated to be dead 1-2 days and was partially consumed. It also had been partially skinned by other investigators prior to ODFW arrival. No evidence of a chase or struggle was observed. All bite marks observed on the bones were consistent with coyote teeth. The only sign of injury observed were two minor hematomas on the lateral side of the left front leg in the area of the knee. One was associated with a small scrape on the hair side of the hide. Other scratches on the same leg were not associated with hematoma on the inner side of hide and were considered to have occurred post-mortem. While it is possible that other injuries occurred on areas consumed, the head, neck, back, and other three lower legs showed no sign of predation. The only tracks found in the area were from coyote, cattle, and humans.

## ODFW Wolf Depredation Investigation Summary

**Date:** 8/6/12/12

**County:** Wallowa

**General Area:** South of Downey Lake – Private Land

**Situation:** On the morning of 8/6/12 ODFW received a report of a dead adult cow in a grassland pasture south of Downey Lake. Wolves were suspected and ODFW investigated the same morning.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** None found upon examination of the carcass or surrounding area. The area has been used in the past by Imnaha Pack wolves, though primarily during winter and spring months. There was no radio collar data indicating that Imnaha Pack wolves were in the area.

**Summary of evidence:** The cow was estimated to have been dead approximately one day. The carcass was nearly complete, but had a large opening under the tail and between the hind legs. Some muscle tissue around the pelvis was consumed, and the pelvic bone was chewed on. There was no evidence of a chase or attack scene. The cow appeared to have been down and pulling itself along with its front legs as indicated by marks in the grass for approximately 25 yards. No hemorrhaging was observed in muscle tissue of the hind legs. No cuts or scrapes were observed on the animal. Several coyote scats were found near the carcass, and coyote fur was observed in the grass near the carcass.

## ODFW Wolf Depredation Investigation Summary

**Date:** 8/14/12

**County:** Umatilla

**General Area:** Pine Creek Area, East of Weston, OR – Private Land

**Situation:** On August 12, 2012 the carcass of an adult cow was found in a side draw to Pine Creek in NE Umatilla County. The area is within the Umatilla River Pack homerange and wolf predation was suspected. ODFW was asked to investigate the carcass on 8/14/12.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No wolf sign was found at or near the carcass. Between the dates of Aug. 8 and Aug. 12, 2012 there were no reports of wolves in the area of the carcass. GPS collar data for OR14 (an adult male wolf) for the same time period (Aug. 8 – Aug. 12, 2012) show that this individual wolf was no closer than 9.3 miles to the carcass site.

**Summary of evidence:** The producer reported that other cattle in the area had appeared agitated when the carcass was first discovered. The carcass was intact with only a small amount of scavenging apparent near the anus. There was significant decomposition and the carcass had been dragged about 20 yards downhill from its original position. The only noticeable marks appeared to be scrapes on the upper left side that were possibly made by claws. However, there was no hemorrhage under the hide and the marks were made post mortem. Hide was missing from lower jaw, left side, and no marks were observed on the jaw bone itself. No marks were observed in the flank, front shoulder, or hind end area. The mammary glands were intact and showed no signs of biting, tearing or marking. There were five scrape marks in the hide located 8-10 inches below the spine on the left side of the carcass. The hide was removed from this area and no associated subcutaneous hemorrhaging was observed. The scrape marks appeared to be associated with hair slippage due to decay of the carcass. We found no wolf sign or evidence of a struggle or kill scene.



## ODFW Wolf Depredation Investigation Summary

**Date:** 8/20/12

**County:** Baker

**General Area:** Kirby Reservoir Area – Public Land (BLM)

**Situation:** On August 18, 2012 a carcass of a calf was found. Wolf predation was suspected. ODFW was asked to investigate the carcass after dark on August 19, 2012. The investigation was done the next morning.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** No wolf sign was found at or near the carcass. There have not been any recent reports of wolves in the area.

**Summary of evidence:**

The whole untouched carcass was found on its stomach by the livestock producer; intact except for the entrails hanging out of the abdomen. Before the ODFW examination, a bear and coyotes scavenged a small area around the back and upper left hind leg. There were premortem scrapes on the rear of the hindquarters and lower hind legs. The hair was gone and there was shallow bruising in the muscle tissue under the scrapes. There were no tears or deep damage in the muscle tissue. There was no evidence of a struggle or kill scene. There was no evidence on the carcass that the calf was attacked or killed by a predator. The carcass was scavenged and tracks of bear, coyote and bobcat were found near the carcass.

## ODFW Wolf Depredation Investigation Summary

**Date:** 8/29/12

**County:** Wallowa

**General Area:** Twobuck Creek East of Joseph, OR – Private Land

**Situation:** At 6:05PM on 8/29/12 ODFW received a report of a dead calf in a grassland pasture near the upper end of Twobuck Creek. The calf was discovered by the owner while moving cattle to another pasture on the same day. Wolves were suspected and ODFW investigated the same evening.

**ODFW finding:** Possible/Unknown

**Evidence of wolf presence in the area:** The area has been used in the past by Imnaha Pack wolves, though primarily during winter and spring months. Imnaha pack member OR-4's GPS collar location was 1/2 mile south of the carcass at 12:00 AM on 08/25/12, and 1.5 miles northeast of carcass at 3:00 AM on 08/25/12. Two possible wolf tracks (estimated 3-4 days old) were observed on skid road approximately 75 yards east of carcass. Track length was 4 inches, and width was 3.5 inches.

**Summary of evidence:** The estimated date of death, based on maggot development, was 8/25 or 8/26. The carcass bones were mostly intact, but the end portions of six left ribs had been chewed off. No organs remained, and the carcass muscle tissue was estimated to be 90% consumed. The muscle tissue of the front shoulders, neck and head remained. There was no physical evidence of a struggle scene, and no bite marks were found on the carcass. Most of the carcass appeared to have been consumed post-mortem (scavenged). Though there was significant vessel and tissue decomposition and pooling of fluids, no evidence of pre-mortem hemorrhage was observed. A scrape in skin below the hock of right hind leg (1 inch horizontal, 1.5 inch vertical) was beginning to heal. Yellow fluid in the subcutaneous tissue underneath the scrape suggests the injury occurred several days to one week prior to death. The cause of death of this calf was unclear.

## ODFW Wolf Depredation Investigation Summary

**Date:** 8/31/2012

**County:** Baker

**General Area:** Fish Lake area (USFS)

**Situation:** On 8/31/2012, a USFS employee reported wolf tracks near the carcass of a dead adult cow on a USFS grazing allotment. ODFW examined the cow the same day.

**ODFW findings:** Confirmed wolf kill

**Evidence of wolf presence in the area?** The Imnaha wolf pack utilizes this area regularly during the fall months. There were multiple wolf tracks at the carcass. GPS radio collar data places the Imnaha pack alpha male, OR4, at the location of the cow starting at 9pm on 8/29/2012. Locations collected every 3 hours show that OR4 was present at the carcass for the majority of the next 2 days. Two wolves were heard howling nearby during the investigation and one wolf approached within 100 yards.

**Summary of evidence:** The carcass lay with its head folded underneath its body in a small creek/ditch. There were no marks of the cow struggling to get up, the cow likely died when it fell. No sign of a chase scene was detected; however visibility was limited due to the investigation being conducted as darkness fell. The intact carcass had been partially scavenged. The hide and muscle had been scavenged from the rectal area, right side hindquarter, abdomen, and ribs. The remainder of the cow was skinned. Premortem hemorrhaging and tissue damage was found on the body behind the right elbow consistent with wolf bite wounds. This is a typical wolf attack location. The cow was estimated to be dead for 2 days which is consistent with OR4's arrival at the scene. There was very little decomposition even around the abdominal cavity which indicates that the rumen had been removed quickly after the death of the cow, before it bloated and affected adjacent tissue. This is the most common site for a wolf to start feeding. It is uncommon for wolves to kill adult cows, but ODFW has confirmed that OR4 and the Imnaha pack have killed several.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/3/12

**County:** Wallowa

**General Area:** Jaynes Ridge – Public Land (USFS)

**Situation:** On 9/3/12, ODFW received a report of an injured cow and calf on a USFS allotment in a forested area of the Imnaha Pack. Wolves were suspected and ODFW investigated the same morning.

**ODFW findings:** Calf – Confirmed  
Cow - Probable

**Evidence of wolf presence in the area?** The injured calf was found weeks after the injuries were inflicted, so there was no scene to search for wolf sign. This area has been commonly used by the Imnaha Pack year-round. There is no GPS data indicating that OR4 was in the area at the time of depredation.

**Summary of evidence:** Calf - The approximately 350 pound calf was alive at the time of the investigation. It had major injuries in the soft tissue between the hind legs (groin area) that were healing, but some were still open and draining. There were bite scrapes (some with scabs) on the lower hindquarters, groin and front legs near elbow. There are significant similarities between this calf's injuries (estimated to be 2-3 weeks old) and the calf found freshly injured on 7/26/2012 three miles away. The size, location and depth of the bite wounds are typical of wolf attack.

Cow – The cow had 3 small scrapes on the hindquarters that could have been bite scrapes the same age as the calf's injuries. The livestock producer reported a dramatic change in this cow's behavior; becoming very wild, more protective of her calf, and aggressive towards his dogs. The cow's injuries are classified as probable wolf.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/11/2012

**County:** Union

**General Area:** Catherine Creek – state-owned land

**Situation:** On 8/21/2012, a ranch employee found 2 dead cows that were decomposing, but no follow up was conducted. On 9/7/2012 a hunter found a dead cow in the same area and reported it to the ranch foreman. On 9/10/2012 the ranch foreman checked the livestock and found 4 dead cows total. Wolves were suspected. ODFW was called on the morning of 9/11/2012 and examined the cattle the same morning. The investigation was conducted cooperatively by ODFW, Union County Sherriff, and USDA-Wildlife Services.

**ODFW findings:** Possible/Unknown

**Evidence of wolf presence in the area?** There was no evidence of wolf presence in the pasture. The producer has had trail cameras up for 2 years and has not captured any pictures of wolves. There are no known wolves in the area.

**Summary of evidence:** Nine fully decomposed and scavenged carcasses (5 two year-old cows and 4 calves) were discovered during the investigation. All appeared to have died about the same time (3 – 4 weeks ago) and showed a similar state of decomposition. The carcasses were located over a distance of about 600 yards and were in close proximity to a pasture fence along one edge of a forested pasture. Three of the carcasses were found right up next to the fence. Several of the cows had very little scavenged but had been mostly consumed by maggots. Several of the calves had been consumed by predators (bear and coyote sign was found) and their bones scattered. There was no muscle tissue left on the carcasses. The majority of the hide was present on or near each carcass. The hides were examined for scrapes and holes, and no premortem injuries were found. The cause of death of the cows is unclear, but does not appear to be related to predation of any kind.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/11/12

**County:** Wallowa

**General Area:** Rail Canyon – Private Land

**Situation:** On the afternoon of 9/11/12, ODFW received a report of a dead calf in a forested pasture near a water trough. The cattle in this pasture had been checked four days earlier. The area is within the Imnaha Pack home range and wolves were suspected. ODFW investigated the same afternoon.

**ODFW findings:** Probable Wolf

**Evidence of wolf presence in the area?** A fresh set of tracks from a single wolf (4”L x 3.5”W) was observed about 200m away from the carcass. No tracks or sign of wolves was found at the scene of the dead calf, though such sign may have been obscured by the large number of cattle using the area around the trough. No GPS-collared Imnaha Pack wolf locations (or any other telemetry locations) have occurred recently in the area of this calf. On about 8/18/12 a wolf depredation (Imnaha Pack) occurred on Jaynes Ridge – about 10 miles from this calf carcass.

**Summary of evidence:** There was no evidence of a struggle or chase, although the scene had been severely disturbed by the remaining cattle in the area near the water trough. Numerous coyote tracks were observed in the area of the carcass and water trough. The calf was estimated to have died sometime late in the day on 9/10/12. All entrails were missing, and the rumen material was scattered on the ground about 30m east and upslope of the carcass. Most of the muscle tissue had been consumed, though some muscle remained above the pelvis, the head and upper neck, and most of the muscle between the ribs. The skeleton was intact and articulated, with the exception of the right front shoulder, which was missing entirely. The rib cage was nearly intact and most ribs were still attached to the sternum with muscle between. Some of the rear ribs and the lateral processes of the lumbar vertebrae had been chewed around the edges and about 1" of one lateral process had been chewed away.

Pre-mortem hemorrhages on opposing sides of both hocks suggested that they were caused by a predator of unknown species biting those areas rather than by the legs being knocked against hard objects (e.g. rocks, sticks).

The small size and apparent small spacing (1 ¼”) of the marks on the knee/flank area, plus the lack of significant hemorrhage associated with these marks suggest they are bites from a smaller predator than a wolf.

Though the bites identified do not suggest killing wounds by themselves, they do indicate that predation occurred. There is little evidence remaining on the carcass to confirm as wolf. However, the area has experienced confirmed depredation in the past by the Imnaha Pack and nearby wolf sign puts at least one member of the pack near the carcass.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/13/12

**County:** Wallowa

**General Area:** Tucker Down Road – Private Land

**Situation:** On the afternoon of 9/13/12 ODFW received a report of a dead calf in a grassland pasture near Tucker Down Road. Wolves were suspected and ODFW investigated the same evening.

**ODFW findings:** Other

**Evidence of wolf presence in the area?** None found upon examination of the carcass or surrounding area. The area has been used in the past by Imnaha Pack wolves, though primarily during winter and spring months. There was no radio collar data indicating that Imnaha Pack wolves were in the area.

**Summary of evidence:** The dead calf was reported to about 10 days old and was estimated to have weighed approximately 120 lbs. Some membrane remained on the bottom of the calf's hoof. Very little muscle remained on the skeleton and only in hard to reach locations between bones. All soft tissue was consumed, except skin of both lower hind legs and a small skull cap of skin. Vertebral column was intact, but many ribs were chewed off. Left hind leg bones were attached to pelvis by a small tendon and right hind leg was nearby, but unattached. Front legs were both missing except for one scapula located about 8 m east of the carcass. One lower mandible was separated from the skull, but near carcass. The second lower mandible was located about 30 m west of the carcass.

Nasal bones and cartilage were chewed and nasal passage tissues appeared to be very red/inflamed. It is undetermined, but possible this is a result of trauma. No significant pre-mortem hemorrhaging was found on small area of remaining skin. Many bones had been chewed on and cartilage removed. Two small canine tooth holes were found on one lower mandible. All predator sign found on the carcass and in the area was of coyotes. Though it is unknown if coyotes killed this calf, it is possible. Numerous small tooth marks on the carcass remains and the scatter of bones around the scene suggest that this calf was consumed by more than one coyote.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/14/12

**County:** Wallowa

**General Area:** Threebuck Creek area – Private Land

**Situation:** On the evening of 9/14/12 a rider found a dead calf on his neighbor's ranch. Wolves were suspected and ODFW investigated the same evening.

**ODFW findings:** Confirmed Wolf

**Evidence of wolf presence in the area?** No wolf sign was found in the area around the carcass; it was near a pond with heavy cattle use. Earlier in the evening two partial wolf tracks were found 1 mile away at another depredation investigation. There was no GPS radio collar or telemetry data indicating that the 2 radio-collared members of the Imnaha Pack were in the area.

**Summary of evidence:** The carcass of the 450 pound calf was estimated to be about 24 hours old. The tissue on the carcass was mostly consumed with tissue remaining on the lower hind legs, neck, head and some along the spine. There was hemorrhage on the hide behind the front right shoulder. There was a 2 x 4 inch area of hemorrhage and deep tissue damage at the base of the neck. These premortem injuries are consistent with a wolf depredation.



## ODFW Wolf Depredation Investigation Summary

**Date:** 9/14/12

**County:** Wallowa

**General Area:** Rail Canyon area – Private Land

**Situation:** On 9/14/12 a rider found a dead calf while checking the herd. Wolves were suspected and ODFW investigated the same day.

**ODFW findings:** Probable Wolf

**Evidence of wolf presence in the area?** During the investigation, two partial wolf tracks were found about 80 feet uphill from the carcass. A fresh set of tracks from a single wolf was observed approximately ¼ mile away on 9/11/12. There was no GPS radio collar or telemetry data indicating that the 2 radio-collared members of the Imnaha Pack were in the area.

**Summary of evidence:** The carcass of the 550 pound calf was almost completely scavenged and estimated to be 5 days old. The only hide and tissue left on the carcass was below the knees and hocks and above the nose and forehead. The front legs were found downhill from the carcass. No evidence of premortem trauma was found on the carcass, however the majority of the carcass was consumed. A small area of dried blood was found 20 feet from the carcass on dried grass and sticks. It is possible that this area of blood was from an attack and with wolf tracks nearby the dead calf was determined to be a probable wolf kill.

## ODFW Wolf Depredation Investigation Summary

**Date:** 9/28/12

**County:** Wallowa

**General Area:** Crow Creek Area – Private Land

**Situation:** On 9/28/12 fence builders found 2 dead calves. Wolves were suspected and ODFW responded the same afternoon.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No sign of wolves at the scene. No locations or observations of wolves in the area in recent months.

**Summary of evidence:** One carcass, estimated to have died on 9/27/12, was mostly intact with some scavenging of the right flank, right hind leg and abdomen. The heart, lungs, liver and lower intestines were present. The calf was skinned and no premortem hemorrhaging was found. There was a light bloody discharge from the nose. The other calf was estimated to have died on 9/23/12, only the bones of the head, rib cage, right rear leg and vertebrae remained. Signs of coyote scavenging were present on both carcasses. Several live calves from this herd were observed with foam from the nose and mouth and one adult bull was observed to be thin and had considerable opaque discharge from its nose. The cause of death was not determined, but it was not the result of a wolf attack.

## ODFW Wolf Depredation Investigation Summary

**Date:** 10/4/12

**County:** Wallowa

**General Area:** Rail Canyon Area – Private Land

**Situation:** A livestock producer found the carcass of a dry adult cow in a grassland pasture on 10/4/12. Wolves were suspected and ODFW responded the same afternoon.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No sign of wolves at the scene. Tracks of one wolf were found on 9/11/12 about 1.5 miles away.

**Summary of evidence:** The carcass was estimated to be 3-4 weeks old. There was no soft tissue remaining and only about 30% of the dried hide remained. The skeleton was partially disarticulated. The legs were still intact and attached to the carcass by the hide, except for one that was moved a short distance from the carcass. There were signs of birds and coyotes scavenging the carcass, but no marks were found on bones from larger carnivores. From the position of the carcass it appeared that the cow had lain down and died.

## ODFW Wolf Depredation Investigation Summary

**Date:** 10/15/2012

**County:** Baker

**General Area:** Doe Creek Area – Public Land

**Situation:** A livestock producer found the remains of a dead cow in a forested pasture on 10/14/12. The carcass was reported to be fairly old, but the area is on the edge of the Imnaha Pack home range and ODFW was asked to look at the carcass. The carcass was investigated the following afternoon.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No sign of wolves was observed at or near the scene. Though the area is near the edge of the recorded homerange of the Imnaha pack, there has been no data of radio-collared wolves in the area.

**Summary of evidence:** No sign of a struggle or kill scene was found during the investigation. The carcass was very decomposed and it appeared that substantial time had passed between death and discovery of the animal. Bear tracks and scat found near the carcass. Carcass was scattered and consisted of clean bones and rotted hide. No chewed bones were evident upon inspection. No muscle or organs were present. The tissue that remained on the carcass at the time of the investigation was very decomposed and contained mature maggots. Rumen contents were present slightly up slope of the carcass. Some rib bones were present with the rumen contents while the rest occurred down slope with the hide. Due to decomposition of the carcass and the rotted nature of the hide no marks could be observed. The left rear leg was broken above the knee joint. Close inspection of the broken bone revealed no bite marks or abrasions around the break. This carcass appears to have rotted in place. The lack of chew marks on the bones suggests that substantial decomposition occurred before scavenging. There is no evidence of predation of this cow.

## ODFW Wolf Depredation Investigation Summary

**Date:** 10/17/2012

**County:** Wallowa

**General Area:** Little Sheep Creek Area – Public land

**Situation:** A livestock producer found the carcass of a calf in a forested pasture on 10/16/12. The calf had been dead for some time and ODFW was asked on 10/17 to investigate the remains for signs of wolf predation. ODFW responded the same afternoon.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No sign of wolves was observed at or near the carcass. However, the area has been periodically used by the Imnaha Pack over the past month as indicated by radio-collared wolf (OR4) locations in the general area. There is no location data which puts OR4 within a mile of the carcass itself.

**Summary of evidence:** The carcass was mostly consumed and very decomposed. No sign of a struggle or kill scene was observed. Hair tufts and dark staining on sod from body fluids at the base of a spruce tree suggests the carcass began to decompose prior to scavenging. The bones were disarticulated and a small portion of the hide attached to right hind leg was peeled back – characteristic of black bear feeding. Small bite marks on skull, rib, and leg bones indicate scavenging of the carcass by coyotes. Unable to determine any pre-mortem injuries due to the advanced state of decomposition. No indication of predation was observed.

## ODFW Wolf Depredation Investigation Summary

**Date:** 10/20/2012

**County:** Wallowa

**General Area:** Kinney Lake Area – Private Land

**Situation:** A livestock producer found the carcass of a calf in a grassland pasture on the morning of 10/20/12. Wolves were suspected and ODFW responded the same morning.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No sign of wolves at the scene. No radio collared wolves in area.

**Summary of evidence:** The skeleton was essentially intact, although both front legs were attached only by skin. Only about 5-10% of the meat remained on the carcass and this was in a strip from the upper left front shoulder along the neck to the head. This area had been against the ground and protected from scavengers by the skeleton. All internal organs were gone and about 1/2 of the hide, as well. The ribs were essentially intact, although several had been chewed on near their tips. The meat between the ribs was nearly all intact. The right scapula had about a piece chewed off at the dorsal tip (5x5cm), and some of the pelvis had been chewed on. All evidence of the animals that consumed the carcass was of coyotes, eagles, and ravens. The presence of large amounts of coagulated blood in many veins and arteries on the down side of the carcass suggests that the calf did not bleed to death. The cause of death of this calf is unknown, but does not appear to be a result of wolf predation.

## **ODFW Wolf Depredation Investigation Summary**

**Date:** 11/21/2012

**County:** Harney

**General Area:** S. Malheur Lake Area – Private Land

**Situation:** A livestock producer found a dead 600 lb steer in an irrigated pasture on 11/21/12. Though no wolves are known to occur in Harney County, wolf depredation was suspected and ODFW was asked to look at the carcass. The carcass was investigated the same afternoon.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No evidence of wolves was observed at or near the scene.

**Summary of evidence:** No evidence of a struggle or kill scene was found during the investigation. Other cattle in the pasture appeared calm and indicated no recent disturbance. The carcass was mostly intact, but had some scavenging on both hind quarters and entrails. Only dog and coyote scat were found in the vicinity of the carcass. The carcass was skinned and no evidence of bite marks or bite trauma was observed. Investigators observed that the 600 lb steer had been recently castrated, and this was confirmed by a neighbor who stated the animal had been castrated on the 16<sup>th</sup>. Upon skinning, investigators discovered large amounts of swelling and associated yellow fluid in the entire ventral portion of the animal (brisket area to the hocks), and especially in the groin area – clear indication that the animal suffered widespread infection. No evidence of predation of any kind was observed and though the specific cause of death was unknown, it was likely related to systemic infection.

## ODFW Wolf Depredation Investigation Summary

**Date:** 12/3/2012

**County:** Wallowa

**General Area:** Elk Mountain Area – Private land

**Situation:** A livestock producer found the carcass of an adult cow in a grassland pasture late in the afternoon of 12/2/12. The livestock had been checked 10-14 days earlier. ODFW was asked to investigate the remains for signs of wolf predation. ODFW responded early the next morning.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No tracks or physical evidence on carcass to indicate that wolves were present at the site. OR4 (Imnaha pack) has not been within 13 miles during the last 8 months.

**Summary of evidence:** The estimated date of death was 11/25/12. There was no sign of a struggle or kill scene observed. The carcass muscle tissue was completely consumed, no organs remained, and both front legs, shoulders, and sternum were missing. There was rumen material on the ground 10 yards up slope of the carcass. The femur bones and the ends of all rib bones and lateral processes had been chewed by scavengers. No hide was present except on the lower 10 inches of both hind legs. The subcutaneous tissue under the hide and surrounding bones of both lower hind legs was mostly white and normal in appearance with no sign of premortem bites or bruising. No physical evidence of predation was found on the carcass.



## ODFW Wolf Depredation Investigation Summary

**Date:** 12/18/2012

**County:** Wallowa

**General Area:** North of Lostine – Private land

**Situation:** A livestock producer found the partially consumed carcass of a calf on the morning of 12/18/12. It was in a grassy area adjacent to an alder riparian zone and about ½ mile from his house. The producer had been working with the cattle the evening before. Wolves were suspected and ODFW investigated the same morning.

**ODFW finding:** Other

**Evidence of wolf presence in the area:** No tracks or physical evidence on carcass to indicate that wolves were present at the site. The nearest known wolf presence (Sled Springs pair) is about 9 miles north of this site.

**Summary of evidence:** The carcass was still warm and estimated to have died during the night. The hide was intact except for the right flank and hindquarter area. The intestines and the muscle from the hindquarter had been scavenged. Once the carcass was skinned, premortem trauma was found on the upper front portion of both shoulders, left side of the neck, both elbows, the ribs behind the right elbow and one knee. There was also extensive deep premortem hemorrhaging in the throat just behind the jaw. There were fresh tracks of cougar and coyote in the snow. The scene and the nature and location of the injuries indicate the calf died of a cougar attack.