

ODFW Wolf Depredation Investigation Summary

Date: 8/15/11

County: Wallowa

General Area: Griffith Creek (private land)

Situation: Late in the evening of 8/14/11 a dead adult cow was found on private land east of Joseph, OR. Wolves were suspected and ODFW examined the cow the next morning. The carcass was mostly intact (some feeding/scavenging had taken place) and was examined for evidence of wolf attack.

ODFW findings: Possible/Unknown

Evidence of wolf presence in the area? The cow was determined to have died between Friday (8/12) and Saturday morning (8/13). On Friday (8/12) the two GPS collared wolves (locations collected every 3 hours) were 10 miles away and 3000 higher in elevation in the mountains to the south, then spent Saturday (8/13) in Carrol Cr, 3.5 miles away. The GPS radio collared wolves were in the area of this cow on Sunday morning (8/14 5am) and Sunday night (8/14 11pm, 8/15 2am). No evidence was found which indicated that wolves were at the site before Sunday morning. Since June 2, 2011 GPS collar data shows wolves in this area only sporadically, with the majority of their time being spent in the mountains to the south and east.

Summary of evidence: The cow was almost entirely intact lying on its left side. There is no pre mortem bite wound trauma or hemorrhage that would show that the cow was attacked or bitten while it was alive. There is no attack scene or struggle site, no soil or vegetation disturbance was found immediately next to carcass or in the area. There is evidence of scavenging. There are marks on the hair side of the hide that appear to be canine scrapes. The muscle under these marks has no holes, damage or hemorrhage and the flesh side of the hide had no marks, no vessels were broken, and no hemorrhage or blood stains from subcutaneous bleeding, therefore these marks were made postmortem. These marks are only on the up side of the cow that was available to be scavenged on. No tooth scrapes were found on the down side of the cow. No tissue damage or hemorrhage to any muscle was found on the down side. There were openings to the abdominal cavity through the anal area and flank, some of the intestinal tract was missing, though the muscle of the hind legs was intact. There was no hemorrhage on the margins of these areas. The determination of possible/unknown was made based on lack of evidence that the animal had been killed by a predator of any kind, since there was no kill site or pre-mortem bite marks.

ODFW Wolf Depredation Investigation Summary

Date: 8/16/11

County: Wallowa

General Area: Kuhn Ridge (USFS)

Situation: A livestock producer noticed injuries to a live cow while checking his cattle on a USFS grazing allotment. The cow was hauled to Enterprise for examination.

ODFW findings: Possible/Unknown

Evidence of wolf presence in the area? No wolf sightings or tracks have been confirmed in this area this summer. This area is outside the range of the Imnaha pack. There is no evidence of resident wolf presence, though wolves could be moving through the area at any time.

Summary of evidence: The injured cow was examined in a squeeze chute. The ventral and rear surfaces of the udder had very deep cuts or tears. The injury appeared to be 2-3 weeks old. Due to the scabs and healing of tissue, the cause of the udder injury was impossible to determine. There were surface scratches of unknown cause on the cow's right front shoulder and below right hip bone that were mostly healed. There was one other mostly healed mark on the cow's hide, a single cut (less than 3/8 in deep and 3/4 in long) on the rear of the right hind leg of unknown cause. The cause of the cow's injuries is unknown.

ODFW Wolf Depredation Investigation Summary

Date: 8/29/11

County: Umatilla

General Area: Government Mountain Area (private land)

Situation: An adult female cow was found dead in a meadow near a heavily forested area on Sunday, August 28. A black bear was sighted at the carcass when the initial discovery was made. The carcass was covered to deter further scavenging before examination. The livestock producer contacted ODFW and arrangements were made to meet at the site the following morning at 0700.

ODFW findings: Possible wolf/unknown

Evidence of wolf presence in the area? No tracks or scat were found at the carcass or surrounding area (within 100 yards). However, as recently as 2 weeks before the mortality, ODFW Umatilla Wildlife District personnel had located tracks near the location where the cow was found during standard wolf sign reconnaissance surveys on Government Mountain Road. From Government Mountain Road, the dead cow was in view at a distance of no more than 400 yards.

Summary of evidence: The carcass was largely intact and the skin largely undisturbed except for some minor scavenging activity near the bag area and the anal area. Aside from some mammary disturbance, the viscera were mostly intact. Marks on the outside of the hide consistent with bite marks existed on the left cheek and bag area of the cow. Additionally a mark that could have been interpreted as a bite was on the bridge of the nose. When skinned, none of these locations had subcutaneous hemorrhage indicative of pre-mortem biting. Marks were most likely made by the bear seen scavenging on the carcass. The entire carcass was skinned except for a small area on the neck, two small patches on the top of the back, and near the hooves. The carcass lacked any sub-dermal hemorrhage at any location, ruling out predation as a cause of mortality. The area immediately around the adult cow showed little difference from other areas of the meadow. The meadow had signs of grazing by cattle in the area. The vegetation at the site or in the nearby area showed no signs of an attack struggle. The cause of death of this cow is unknown. A tissue sample of the spleen and heavily decayed rumen contents were collected at the time of the investigation. Samples were taken in accordance with OSU Extension instructions to explore the possibilities of poison plants being the cause of mortality of this and 2 other cows that the operator has lost this summer.

ODFW Wolf Depredation Investigation Summary

Date: 9/05/11

County: Umatilla

General Area: Little Seven Mile Creek Area (private land)

Situation: A livestock producer found a dead calf near a creek on the afternoon of Sept. 4, 2011. He also found what he believed was a wolf track about 50 yards from the carcass. The carcass was examined by ODFW early the next morning. Several pairs of livestock were present in the pasture where the calf was found. The other cows and calves appeared to be relaxed and spread out on the morning of Sept. 5.

ODFW findings: Possible wolf/Unknown

Evidence of wolf presence in the area?

No wolf tracks or scat were found at or in the area of the dead calf.

Summary of evidence:

The calf's death was estimated to be early in the day on Sept. 4, 2011. The carcass was relatively fresh, scavenging had only occurred one night, and no maggots had hatched. The area immediately around the dead calf was searched for tracks, hair, blood, and signs of a struggle. No sign of predation was detected. Bear tracks were observed in a dusty bank leading off the hill down to where the carcass was initially found. The remaining hide on all quarters of the carcass and the neck was skinned and examined for sign of attack. No evidence of pre-mortem bite marks or subcutaneous hemorrhage existed. No evidence of predation was found during the investigation. Due to the lack of predation, samples of lung, rumen wall, spleen, and liver were taken both fresh/frozen and fixed in formalin. No hepatic, or mesenteric lymph nodes, intestine, or kidney samples were taken due to damage to abdominal tissues from scavenging.

ODFW Wolf Depredation Investigation Summary

Date: 9/7/11

County: Wallowa

General Area: Salt Creek Summit area (USFS)

Situation: On 9/7/11, the range rider found a mostly consumed carcass of a dead adult cow while monitoring cattle on a USFS grazing allotment. Wolves were suspected and ODFW examined the cow the same day.

ODFW findings: Probable wolf kill

Evidence of wolf presence in the area? The Imnaha wolf pack uses this area regularly during the summer and fall months. GPS radio collar data places one wolf (Imnaha pack alpha male, OR4) at the location of the cow the nights of September 3-7.

Summary of evidence: The carcass had been mostly consumed by scavengers, with sign of wolves, bear, and coyote present. The carcass consisted mostly of bones and a large piece of hide, with muscle remaining for examination only on the head, neck and lower legs. There was bruising under the skin and tissue damage with muscle hemorrhage down to the leg bone, on the right rear leg below the hock. This is indicative of an injury sustained before death. There were no identifiable tooth marks to be able to confirm this as a bite injury. The underside of the hide from the rear of the hindquarter exhibited dark purple stains suggestive of hemorrhaging. The scene was also examined for evidence of what had happened to the cow. Approximately 35 yards south of the carcass there was evidence in dry dirt of a cow hoofprint scuffs from running and stumbling or sliding down a 5-6 foot high bank into a dry rocky creek bottom. There were seven small scattered patches of black cow hair where the cow fell and scraped against rocks in the creek bottom. Above the bank, 13 feet above the creek bottom, were small tufts of black hair near a rock. This scene indicates a probable wolf chase or attack scene.

ODFW Wolf Depredation Investigation Summary

Date: 9/15/11

County: Wallowa

General Area: Upper Three Buck Creek (private land)

Situation: On 9/15/11 a dead cow was found by the range rider. ODFW was notified and examined the cow the same day.

ODFW findings: Other

Evidence of wolf presence in the area? No. There was no evidence (collar data, sightings, tracks or scat) of wolves at the scene. The radio collar data showed one radio collared wolf OR4 moved into an area as close as 2 miles away on 9/12/11.

Summary of evidence: Carcass was mostly intact; there was no sign of injury (broken bones) or marks on the outside of the cow. Maggots were present in large numbers, with the cow's estimated date of death approximately 9/10/2011. There was scavenging (coyote tracks were present) on the right side of the head and around anus. There was no evidence of a predator attack. The cause of death of the cow is unknown, but unrelated to predation.

ODFW Wolf Depredation Investigation Summary

Date: 9/15/11

County: Wallowa

General Area: Kinney Lake area (private land)

Situation: On 9/14/11 a calf was found dead and mostly consumed. The owner brought the carcass to the ranch house. ODFW was notified the next morning and examined the carcass and the pasture where the calf was found at 7am on 9/15/11. The calf's estimated date of death was 9/12/11 at 1 - 4 days of age; no mother cow had been identified as missing a calf.

ODFW findings: Possible wolf/unknown

Evidence of wolf presence in the area? No. There was no evidence (tracks or scat) of wolves at the scene. GPS collar data show no use of the site by collared Imnaha wolves since 5/30/11. The radio collar data (every 3 hours) showed the radio collared wolf OR4 was as close as 3 miles on the night of 9/12/11.

Summary of evidence: Carcass was mostly consumed, only rib cage, partial spine, and hind leg bones were present. No evidence of pre-mortem trauma or hemorrhage was observed to indicate predation. There was no evidence of an attack or struggle site implicating a predator. There were fresh coyote scats and evidence of coyote scavenging on the carcass but the cause of death of the calf is uncertain.

ODFW Wolf Depredation Investigation Summary

Date: 9/22/11

County: Wallowa

General Area: Griffith Creek (private land)

Situation: On 9/22/11 a dead calf was found on private land east of Joseph, OR. Wolves were suspected and ODFW examined the calf the same day. The carcass was mostly consumed and was examined for evidence of wolf attack.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The calf was estimated to have died during the night of 9/20-21/2011. Multiple wolf tracks were present in the round corral near the carcass, just outside the corral, in the spring 20 yards downhill and on the cow trail 85 yards to the southwest. In addition, GPS radio collar data places OR4, the Imnaha pack alpha male, at the site the same night as the calf's death. This clearly indicates wolves were present at or near the time of death of the calf. OR2 (alpha female) was also determined to be in the general area (non-GPS radio locations). After the examination, ODFW investigators drove to the breaks of nearby Griffith Creek canyon and radio signals from OR4 and OR2 (alpha female) were heard towards the bottom of the canyon on 9/22. At that time a visual observation was made of OR2, but no others were seen due to heavy vegetative cover.

Summary of evidence: We observed a clear struggle/kill scene as evidenced by a disturbance area with multiple areas of blood, tissues, and hair. Blood from the calf was scattered over a large area both inside and outside an old broken-down corral. Within the corral were multiple areas of blood, hair tufts, and sign that the calf had gone down (and then back up) at least once before its death. There was a trail of blood that started 30 feet west of the corral, crossed over the corral logs into the corral, to an area near the carcass that had larger blood spots. The overall scene associated with this dead calf, and the agitated behavior of remaining cattle in this immediate area, is consistent with a predation event.

The calf had been largely consumed within a 36 hour period and little carcass remained. The remains were scattered over a large area. Though there was limited evidence remaining on the carcass itself, there was clear evidence (struggle/kill scene) that the calf was killed by predation and that wolves were present at or near the time the calf was killed. No other large carnivore sign was found and the carcass was largely consumed (and scattered) in a very short time period.

ODFW Wolf Depredation Investigation Summary

Date: 9/23/2011

County: Wallowa

General Area: Coyote Creek area (private land)

Situation: A livestock producer found a dead calf on 9/22/2011 at 7pm. The cows had been checked earlier that afternoon (1 pm) and were reported to be fine. Wolves were suspected and ODFW examined the calf early the next morning.

ODFW findings: Other

Evidence of wolf presence in the area? There was no sign of wolves at the site. However, the property is a wolf use area for the Imnaha pack and depredations have occurred on neighboring properties.

Summary of evidence: There was no evidence of a chase or struggle on the scene. There was no soil disturbance or blood. There were no wounds or injuries on the calf. The carcass was intact and had not been scavenged. There was no sign that predation was the cause of death.

ODFW Wolf Depredation Investigation Summary

Date: 10/8/11

County: Wallowa

General Area: Threebuck Creek Drainage (private land)

Situation: On 10/8/11 a dead calf was found on private land east of Joseph, OR. Wolves were suspected and ODFW examined the calf the same day. The carcass was mostly consumed and was examined for evidence of wolf attack.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The calf carcass was estimated to have been 48 hours old. A wolf track was found in the area near the carcass. GPS-radio collar data shows that the wolf OR-4 was not present in the area of the depredation. This area has a history of regular wolf activity.

Summary of evidence: ODFW observed evidence of a struggle from a bed area under a nearby tree to the carcass (approx. 15 yard distance from carcass). A fresh wolf track was observed near the carcass. Deep wounds (pre-mortem) in left shoulder muscle tissue that were bloody and matched scrapes believed to be wolf bites on the hair side of the hide. Bite marks on remaining hind-leg hide and also on the front shoulder showed 1 1/2" canine tooth spacing. Though evidence of coyote scavenging was observed, no other large carnivore sign was found and the carcass was largely consumed in a relatively short time period.

ODFW Wolf Depredation Investigation Summary

Date: 10/25/11

County: Wallowa

General Area: Deadhorse Ridge

Situation: On the afternoon of 10/25/11 a severely injured adult cow was found on private land east of Joseph, OR. The injuries were determined to have occurred early on the same day. Wolves were suspected and the live cow was brought to town for examination. ODFW examined the cow on the same afternoon.

ODFW findings: Confirmed Wolf

Evidence of wolf presence in the area? Radio-collar data shows that the male wolf (OR4) of the Imnaha pack was present in the pasture at the time of the attack.

Summary of evidence: The cow was examined while still alive. However, it was euthanized following the examination due to its injuries. The cow had a very high number of bite wounds in the following locations; behind front right leg, on left and right flanks, and back hind leg and rump. These bite marks are clearly from large canine teeth. Furthermore, the high number of bites and the bite mark locations are typical of wolf predation. This area has experienced repeated confirmed wolf depredation in 2011, and a wolf (or wolves) were determined to be present at the time of attack.

ODFW Wolf Depredation Investigation Summary

Date: 11/07/11

County: Umatilla

General Area: Bradley Flat (private land)

Situation: A calf was found dead and partially consumed on 11/3/11 on private land in the Bradley Flat area (headwaters of Bridge Creek in the west Birch Creek system). ODFW was notified on 11/7/11 and was asked to examine the animal for possible wolf predation. ODFW responded the same day and the carcass was collected (it had already been moved away from the scene). It was examined on 11/8/11.

ODFW findings: Possible wolf/unknown

Evidence of wolf presence in the area? No. Some unconfirmed sighting reports of wolves have occurred in the area but no evidence of wolf presence has been found at the site or surrounding area. One wolf sighting report was approximately 10 miles to the east of the carcass location in late August. Numerous site visits by ODFW personnel could not confirm wolf presence. Additionally, several rumors of wolves being sighted within 2 miles of the carcass location in the Whittaker Flat area have persisted for 2 years.

Summary of evidence: Areas on the carcass not impacted by scavenging were skinned and there was no evidence of sub-dermal or intramuscular hemorrhage except in a small area on the right side of the neck near the ventral center line at about mid-neck. This hemorrhage extended into the muscle and appeared to have been caused by some blunt force trauma from a medium to small sized singular object. The hemorrhage associated with this wound would not have been sufficient to cause serious injury or loss of life to the animal. No other significant injury or hemorrhage was found on the portion of the animal available for examination.

There was a bear scat at the site of the death of the calf. Both coyote and 1 set of cougar tracks were observed in the snow near the site of death. The only bite marks found on the animal were on the side facing up after death. Additionally, the bite marks were in a region disturbed by feeding activity. The bites were consistent with postmortem activity (scavenging) and were likely caused by a small to medium sized bear.

ODFW Wolf Depredation Investigation Summary

Date: 11/08/11

County: Umatilla

General Area: Government Mountain (private land)

Situation: On 11/08/11 two live cows (cow and calf, not paired) with injuries were found on private forest land east of Milton-Freewater, OR. Wolves were suspected and the owners of the animals contacted ODFW and asked for a determination. ODFW examined the animals on the same day.

ODFW findings: Possible wolf/unknown

Evidence of wolf presence in the area? Yes. Radio collar information and tracks observed by ODFW on 11-05-11 shows that Walla Walla pack wolves were in the location where the cattle were pastured.

Summary of evidence: There were wounds on the cow and scratches on the calf. However, the marking patterns and locations were inconsistent with any of the three predators capable of cattle predation (cougar, wolves, black bear) in this area.

Cow: Had one puncture wound on the neck oozing puss indicating the wound was not fresh. A second wound was on the right cheek of the animal and was a shallow puncture that seemed to cause some damage to the underlying bone indicating the wound was created by applying a large amount of force. No other marks were observed on the animal. The front and backs of all four legs, hips, and flanks were felt in an attempt to locate underlying hemorrhage, but none was found.

Calf: There were dermal injuries found on both the right and left hip of the animal. Additionally, a single mark was found on the right cheek of the calf. Scratches were found on both hips and were wide enough to be from teeth marks. The scratches did not always come parallel to each other, but when they did they were approximately 1 inch apart. The marks were in locations not likely to be used by attacking wolves due to their dorsal location on the body. Additionally, no underlying hemorrhage could be felt at the touch on the body either at wound sites or at any other location. All legs, hips, and flanks were examined.

ODFW Wolf Depredation Investigation Summary

Date: 11/26/11

County: Wallowa

General Area: Dry Salmon Creek area of Zumwalt prairie (private land)

Situation: On the afternoon of 11/25/11, a dead 2 year old heifer was found on private rangeland in the northern Zumwalt prairie area. Wolves were suspected and ODFW examined the carcass early the next morning.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The cow was estimated to have died on Nov 24. GPS radio collar data (collected every 3 hours) shows ; 11/23 2am - OR4 was about 650 yards from where the carcass was found, 11/23 3am – OR4 was about 1000 yards from where the carcass was found. 11/24 11am OR4 was west of Crow Cr, 3 miles from the cow. At 2, 5, 8, 11pm – OR4 was about 3.5 miles northeast of the cow in Salmon Cr.

Summary of evidence:

Though some of the carcass had been eaten, the remaining carcass showed large tooth marks (2” canine spacing) in a number of locations on the hide with hemorrhage underneath. The hemorrhaging under the skin in muscle indicates pre-mortem injuries. Blood was found in the snow in 8 locations from about 30 yards east of the carcass to 10 feet from the dead cow. The attack scene was consistent with a large number of cattle tracks under the snow indicating a major disturbance. There has been previous confirmed wolf depredation in this pasture. Imnaha pack wolves (5) have been regularly observed using this area as a group. Additionally, OR4 was known to be in the area on Nov 24 from GPS radio-collar data.

ODFW Wolf Depredation Investigation Summary

Date: 11/26/11

County: Wallowa

General Area: Pine Creek area of Zumwalt prairie (private land)

Situation: On the afternoon of 11/25/11, a dead 2 year old heifer was found on private rangeland in the northern Zumwalt prairie area. Wolf sign was seen in the area and ODFW examined the carcass the next morning.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The cow was estimated to have died after the snow that fell the early morning of Nov 25. On Nov 25, GPS radio-collar locations (collected every 3 hours) place the alpha male of the Imnaha pack within 200 yards of the cow at 5 am, then about 800 yards away at 8am. Numerous fresh wolf tracks were found near the carcass in the snow placing multiple wolves at the site. The livestock owner reported seeing 5 wolves near the carcass on the morning of Nov 26.

Summary of evidence:

The scene around the cow carcass showed extensive cattle disturbance and fresh wolf tracks in snow intermingled with running cattle. There was blood in the snow up to 50 feet from carcass. The remaining cattle were bunched in a tight group near ranch house. There were multiple bites on the flank area and behind front leg below shoulder. These are characteristic wolf attack locations. There were massive hemorrhage areas deep in the muscle under these bite marks – indicating pre-mortem attack. The evidence on the scene and the carcass show that the cow's death was a result of a wolf attack.

ODFW Wolf Depredation Investigation Summary

Date: 12/11/11

County: Wallowa

General Area: Imnaha River valley (private land)

Situation: On Sunday 12/11/2011 at 5:30 am, ODFW notified the livestock producer that at 5:00 am OR4, the alpha male of the Imnaha pack, was in the immediate area of his cows. By 5:45 am, the producer discovered that his yearling heifers had run through two fences and were out of the pasture near the main barn. The heifers were agitated and scattered up a nearby drainage as far as $\frac{3}{4}$ miles from the pasture they had been in the night before. The heifers were rounded up and counted to see if all had been found. A search was begun when they discovered that one was still missing. The carcass was found about 8:30 am, one half mile up from the pasture.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The carcass was still warm during the examination and had died the morning of 12/11/11. At 5:45 am that morning the livestock producer heard two wolves howling and heard OR4's radio-collar signal on the telemetry receiver checked out to him by ODFW in the area near the carcass. Also that morning the alpha male's (OR4) GPS radio-collar recorded a location at 2 am 330 yards from a main ranch house and at 5 am, 115 yards from the carcass. On Monday 12/12/11, OR4 returned to the area early in the morning. At 4 am the producer reported hearing OR4's signal near the main ranch barns, at 2 am and 5 am his GPS collar recorded locations within 750 yards of the heifer pasture. No signal from OR2's collar was heard either day.

Summary of evidence: The length of the chase (minimum 1/2 mile) and the evidence at the struggle/kill scene is indicative of wolf predation. The evidence included blood and rumen smears on the ground, blood stains on the vegetation, hair tufts, muscle fibers, and vegetation and soil disturbances. There were pre-mortem bite marks and pre-mortem injuries on the carcass indicating a predator attack. The locations, size and quantity of the bite marks, and the depth and damage inflicted by the bites is characteristic of damage caused by wolves. The presence of wolves and the evidence on the scene and the carcass show that the cow died from an attack by wolves of the Imnaha pack.

ODFW Wolf Depredation Investigation Summary

Date: 12/14/11

County: Wallowa

General Area: Imnaha River valley (private land)

Situation: On Wednesday 12/14/2011 at 7:40am, ODFW was notified that another adult cow had been found dead in an area close to the previously (12/11) confirmed depredation in the Imnaha River Valley. The cow carcass had been found the previous day and wolves were suspected as having caused the cows' death. ODFW was asked to investigate and arrived at 9:25 am on 12/14/11. Initial indications were that the injuries which ultimately caused the cows' death occurred in an area different from the carcass location – the cow simply died in this spot.

ODFW findings: Confirmed wolf kill

Evidence of wolf presence in the area? The cow was estimated to have died on the night of 12/12. No wolf sign was found at the carcass. However, initial indications were that the cow sustained injuries at another location on the ranch and died where it was ultimately found. GPS radio locations showed that wolf OR4 of the Imnaha pack was in the local ranch area on 12/8, 12/9, 12/11, and 12/12. On 12/11/11 ODFW confirmed a wolf kill of a heifer 1.4 miles southwest of this cows' location (same ranch).

Summary of evidence: No chase or struggle scene was observed at the site of the carcass. There was clear indication that the animal had sustained injuries in another area of the ranch and simply died where ultimately found. The carcass was observed to have multiple bite wound injuries. On the hind end of the animal we observed severe wounds (with associated muscle trauma and subcutaneous hemorrhage) on the left rump, left flank, and underside of left rear leg. We also observed severe damage (with associated muscle trauma and subcutaneous hemorrhage) in front and behind both shoulders. Bites on the hind end of the animal were identified as large carnivore. In addition, the bite/tooth marks, and associated trauma clearly indicate that the bites occurred pre-mortem.

The bite marks on both hind legs and both shoulders are consistent with wolf attack pattern. The location of injuries on the cow, the high number of bites, and the nature of muscle tissue damage (e.g., extensive subcutaneous hemorrhaging associated with the bites) are clear indications of wolf attack. Wolves were known to be in the area. It is possible that this cow was attacked synonymously with the confirmed wolf depredation on 12/11/11, then died and was detected at a later time.

ODFW Wolf Depredation Investigation Summary

Date: 12/22/11

County: Wallowa

General Area: Ant Flat (private land)

Situation: On the morning of 12/21/11 an injured adult cow was found in a private pasture north of Enterprise, OR. Wolves were suspected and the live animal was brought in for examination on 12/22 /11. Injury was observed on the right, hind leg.

ODFW findings: Possible/Unknown

Evidence of wolf presence in the area? No wolves are known to be present in the immediate area.

Summary of evidence: The hock of right hind leg was injured and swollen. Four small scrapes on surface of right and left hind legs were observed which may or may not have been caused by bites. A 1” diameter scrape with scab did not appear to be result of canine bite, rather the result of contact with a blunt or semi sharp object. Skin scrapes were several days old and below normal location one would expect to find wolf bites. Scrapes may have been caused by bites or may have been the result of contact with some other sharp object. The specific cause of this injury is unknown.