

## California Department of Fish and Wildlife (CDFW)

## CONSIDERATIONS FOR CLASSIFICATION OF REPORTED WOLF DEPREDATION INCIDENTS

Each reported depredation incident is unique and requires a case-by-case analysis of the evidence, context and other factors that inform CDFW's classification process. CDFW strives to conduct investigations as soon as reasonably possible to preserve physical evidence and gather information from livestock producers, property owners/managers, and any eyewitnesses. CDFW may consider the following criteria, among others, when investigating and classifying reported wolf depredation incidents.

**CONFIRMED WOLF DEPREDATION**— Wolf depredation is likely classified as "confirmed" when there is physical evidence that an animal was injured or killed by a wolf. Such evidence includes 1) bite marks and/or tissue damage with associated hemorrhaging patterns that are indicative of wolves<sup>1</sup>, and/or 2) the presence of a chase or kill scene showing wolves had injured or killed the animal<sup>2</sup>. A carcass (or parts thereof) lacking sufficient evidence for confirmation (e.g., a carcass that is largely consumed) may still be confirmed if it is associated with another injured animal or carcass at the same depredation event that has been confirmed as a wolf depredation.

PROBABLE WOLF DEPREDATION – Wolf depredation is likely classified as "probable" when there is evidence to suggest wolf predation, but not enough evidence to confirm it (generally due to a lack of bite marks and/or tissue damage with associated hemorrhaging patterns that are indicative of wolves, as could occur when a carcass has been largely consumed or is too old). A probable determination is based on factors such as evidence of a chase or struggle at the carcass or near the injured animal in combination with evidence that wolves were *likely present* at the time of injury or death (e.g. tracks in general vicinity, telemetry data, etc.). A carcass lacking sufficient evidence for a probable determination (e.g., a carcass that is largely consumed) may still be determined probable if it is associated with another injured animal or carcass at the same depredation event that has been determined to be a probable wolf depredation.

**POSSIBLE WOLF DEPREDATION** – Wolf depredation is likely classified as "possible" when there is evidence indicating an animal was predated and, in the investigator's best professional judgment, predation by a wolf or wolves cannot reasonably be excluded. In these situations, the species involved in the depredation cannot be identified. This classification is typically made within or near areas of known wolf activity.

When depredating, wolves typically bite livestock in the hindquarters, groin, tail, back of the upper parts of the front legs, and throat. The bites often cause deep and significant tissue damage and hemorrhaging in those locations. These common wolf depredation "signatures", as well as signatures of several other carnivores, are provided in detail by the Washington Department of Fish and Wildlife.

<sup>&</sup>lt;sup>1</sup> Bite marks and/or subcutaneous tissue damage with associated hemorrhaging indicate the damage occurred while the animal was alive. Bite marks and/or tissue damage with no associated hemorrhaging indicate postmortem scavenging.

<sup>&</sup>lt;sup>2</sup> Evidence of a wolf chase or kill scene may include but is not limited to 1) spilled or sprayed blood, 2) clumps of hair or other tissue, and/or 3) marks and/or deep tracks suggesting the prey animal's rapid movements or weight shifting, in combination with wolf sign (tracks, hair, etc.) or credible eyewitness observations of wolves in the immediate area of the scene.

**NON-WOLF DEPREDATION\*** - Evidence indicates the animal was injured or killed by a predator other than wolf (e.g., coyote, mountain lion, black bear, bobcat, domestic dog, etc.).

**NON-DEPREDATION\*** – The cause of death was not predation (e.g., disease, poisonous plants or toxins, birthing complications, vehicle collision, lightning strike, etc.).

**UNKNOWN CAUSE OF DEATH\*** – The cause of death cannot be determined. Too few remains may be present for an adequate inspection, or the carcass may be deteriorated to the extent that the cause of death cannot be determined.

<sup>\*</sup> This determination may be made despite wolf scavenging of a carcass.